

FY 2016-17 Climate Action & Sustainability Programs Recap

Martinez City Council

November 1st, 2017

Michael Chandler, Deputy Director of Admin Services

Izabela Cirloganu, CivicSpark Fellow



City of
MARTINEZ

California

Key Projects

- Marin Clean Energy (MCE) Community Choice Aggregation
- Martinez Unified School District Recycling
- California Youth Energy Services Program
- Green Business Program Recertification
- New Staff and Consultant Resources
- Greenhouse Gas Emissions Inventory Updates



Marin Clean Energy

- Completed all necessary actions to join MCE in June 2017; project started November 2015
 - Four Council presentations, three public meetings/workshops, & an online survey
- Upcoming public outreach efforts
 - Contra Costa County Outreach Plan
 - Community Leader Advisory Groups (“CLAGs”)
 - Formation in process; initial meetings December TBD



MUSD Recycling project



MUSD Recycling project

- Completed 2nd year of comprehensive recycling project/CalRecycle grant closeout
 - Program partners include MUSD, New Leaf Collaborative, Republic Services, and City of Martinez
 - 1st Tri-party contract (City, MUSD, New Leaf) for recycling services in June 2015; transition agreement executed in September 2017
 - Goal of transition agreement is to build on success and help MUSD develop, implement and maintain effective and self-sustaining recycling systems



CYES Program in Martinez



CYES Program in Martinez

- City's 4th year of participation
- 800+ residents served from 2014-2017
- Local sponsors Tesoro (Andeavor), Republic Services, and Boys and Girls Club
- Recap presentation November 15th



Green Business Program Recertification

Contra Costa Green Business Program

This certifies that

Martinez City Hall

525 Henrietta Street, Martinez, California

has successfully demonstrated full compliance with local environmental regulatory agencies and taken action to conserve resources and protect the environment. Therefore, this certificate is issued by the Contra Costa Green Business Program on:

September 27, 2017



Susan T. Psara

Susan T. Psara, Green Business Coordinator

Green Business Program Partners: 511 Contra Costa, Bay Area Air Quality Management District, Central Contra Costa Sanitary District, Contra Costa Clean Water Program, Contra Costa Hazardous Materials, Contra Costa Water District, Contra Costa Watershed Program, Delta Diablo Sanitation District, East Bay Municipal Utility District, El Cerrito Recycling Center, Mt. View Sanitary District, Pacific Gas & Electric, PG&E Food Service Technology Center, West Contra Costa Integrated Waste Management Authority, West County Wastewater District, the Town of Danville, and the Cities of: Antioch, Brentwood, Concord, El Cerrito, Martinez, Pittsburg, Pleasant Hill, San Pablo, San Ramon, Richmond, and Walnut Creek.

This certificate is valid for four years unless revoked for cause at the discretion of the local partner agencies.



City of
MARTINEZ

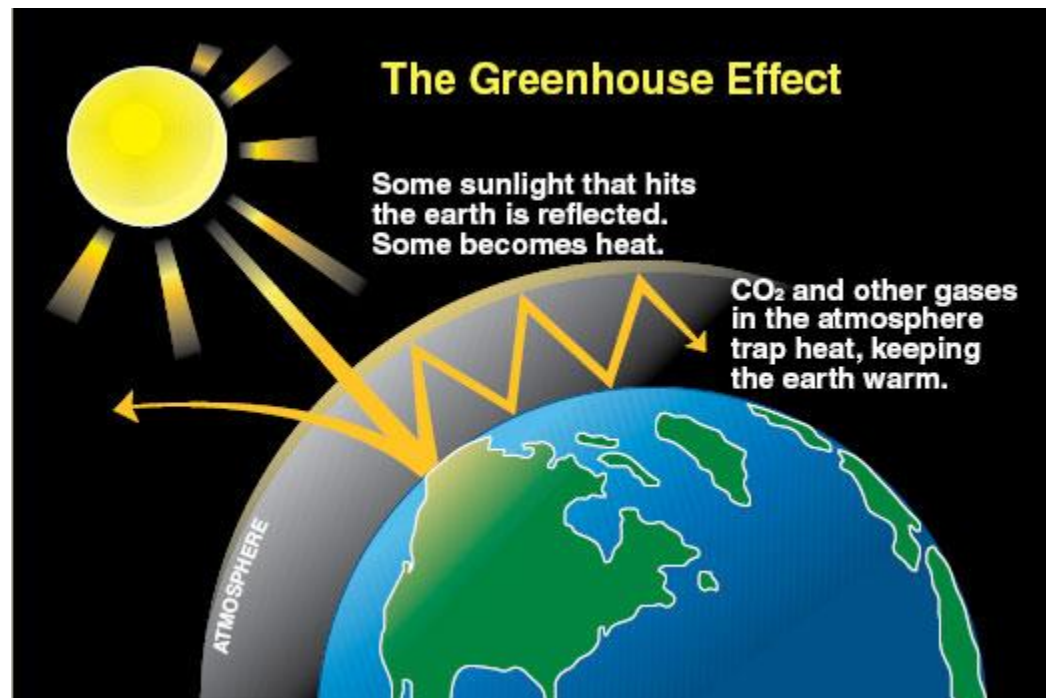
California

New Resources

- Recruited and hired new part-time staff
 - 5th Sustainability Programs Assistant
 - 2nd CivicSpark Fellow
- Secured free technical assistance for City Hall Energy Efficiency project design through East Bay Energy Watch



Green House Gas (GHG) Emissions Inventory Updates



What is a Greenhouse Gas Inventory?

Accounts for greenhouse gasses emitted within the city (base year 2005) by:

- City operations/facilities (Municipality)
- Rest of Martinez (Community)

ICLEI - Local Governments for Sustainability

- Developed standardized tool –CLEARPATH
- Accounts for 6 GHG gases (CO₂,CH₄,N₂O,HFCs, PECs,SF₆)



Why Do Local Governments Develop GHG Inventories?

- Inform Climate Action Planning
- Demonstrate accountability and leadership
- Track GHG emissions performance over time
- Motivate community action
- Recognize the GHG emissions performance relative to similar communities
- Comply with State law

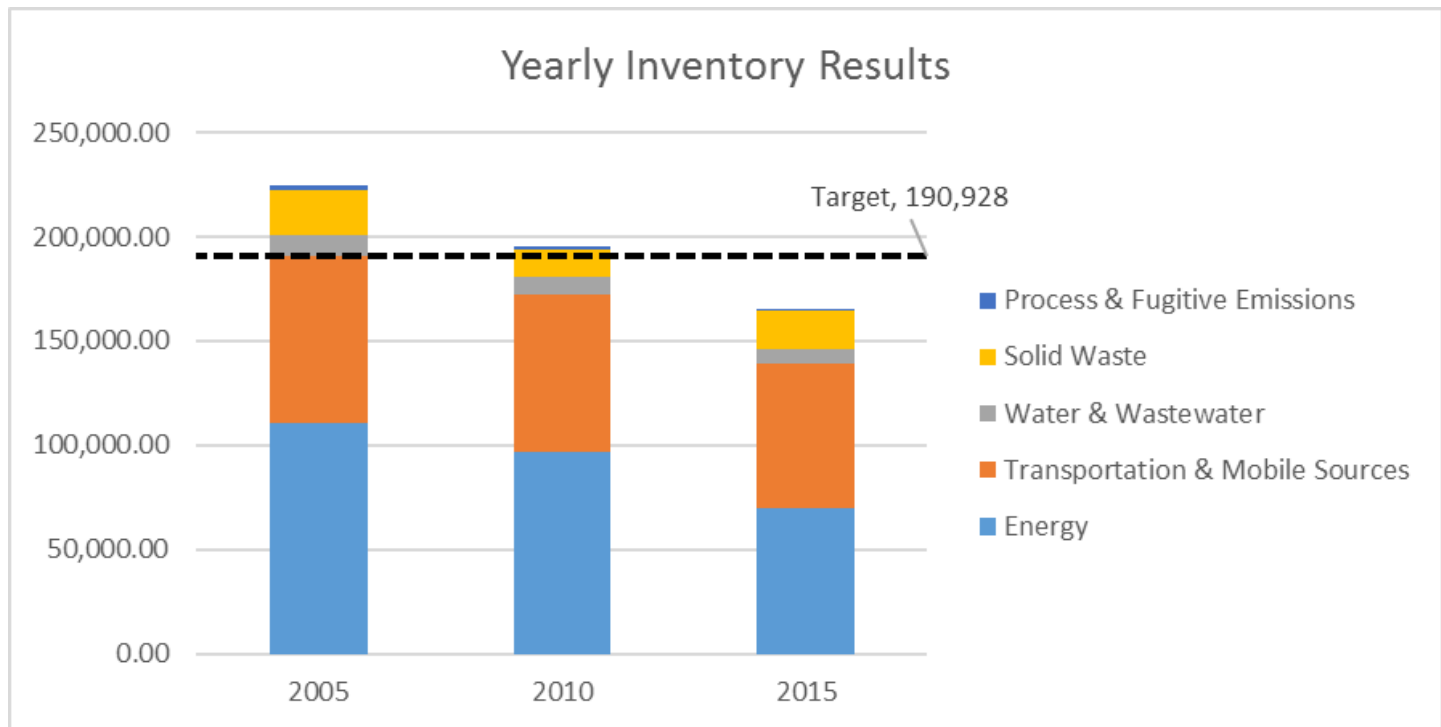


Inventories – Continuous Refinement

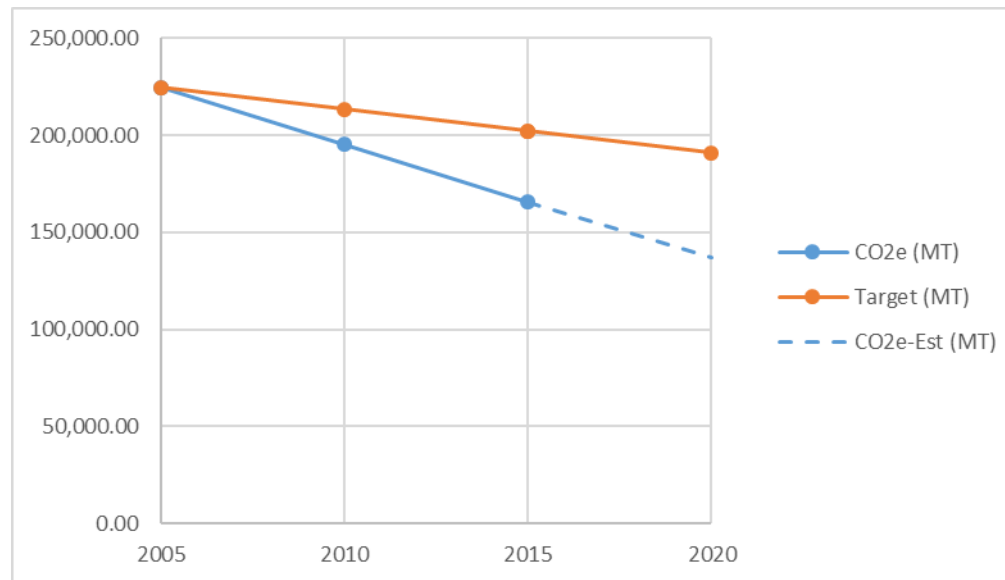
- Methods/calculations have been refined
- Trend towards consistency/comparability in approach
 - Local Governments widely employ ClearPath application
- Early GHG inventories need “adjustments”
- Martinez an early adopter – 2005 baseline recalculated



Community GHG inventories for 2005, 2010 and 2015



Community GHG inventories for 2005, 2010 and 2015

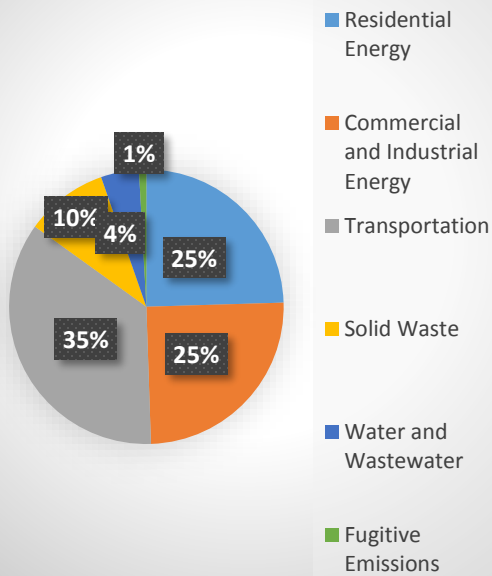


| Year | Energy | Water & Transportation | Wastewater | Solid Waste | Fugitive Emissions | CO2e (MT) | Target (MT) | Percent Reduction |
|------|---------|------------------------|------------|-------------|--------------------|-----------|-------------|-------------------|
| 2005 | 110,842 | 79,838 | 10,090 | 21,908.00 | 1,942 | 224,621 | 224,621 | 0% |
| 2010 | 96,732 | 75,839 | 8,462 | 12,629.00 | 1,677 | 195,339 | 213,390 | 13% |
| 2015 | 69,490 | 69,264 | 7,354 | 18,274.00 | 1,150 | 165,532 | 202,159 | 26% |
| 2020 | | | | | | | 190,928 | |

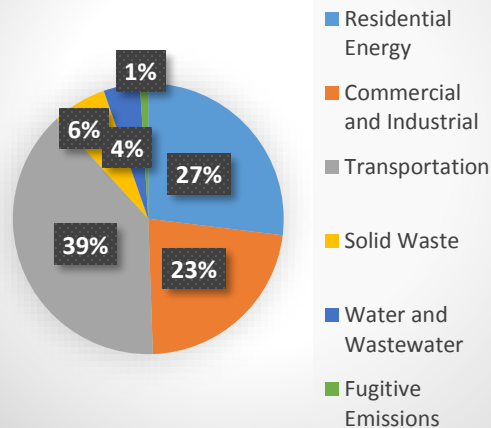


GHG Sectors By Percentages

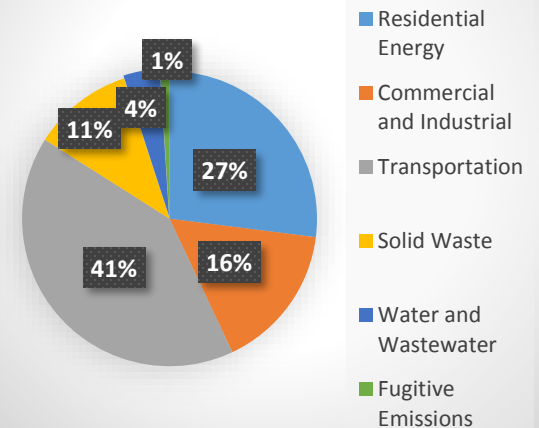
2005 GHG Inventory Percentages



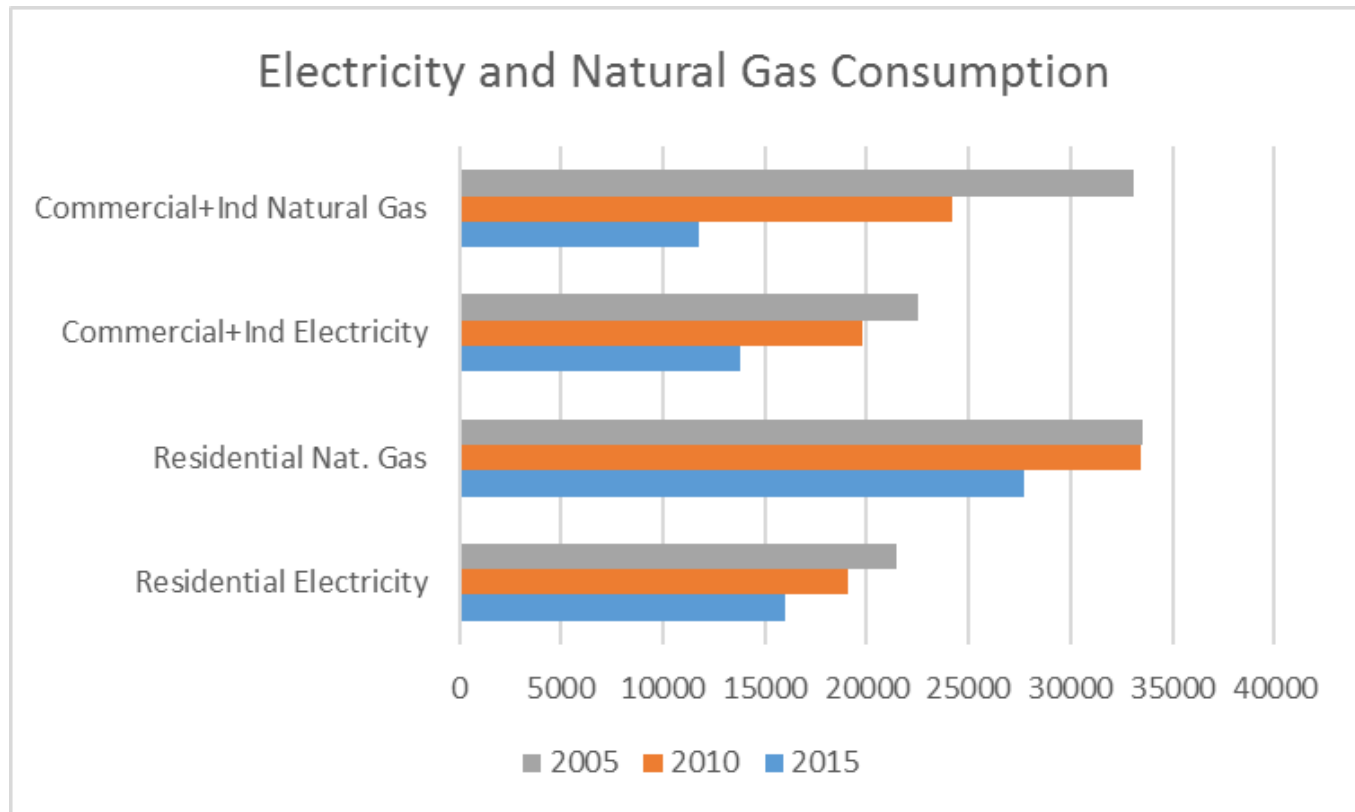
2010 GHG Inventory Percentages



2015 GHG Inventory Percentages



Energy Sector



PG&E 15/15 Privacy Rule

Rule States:

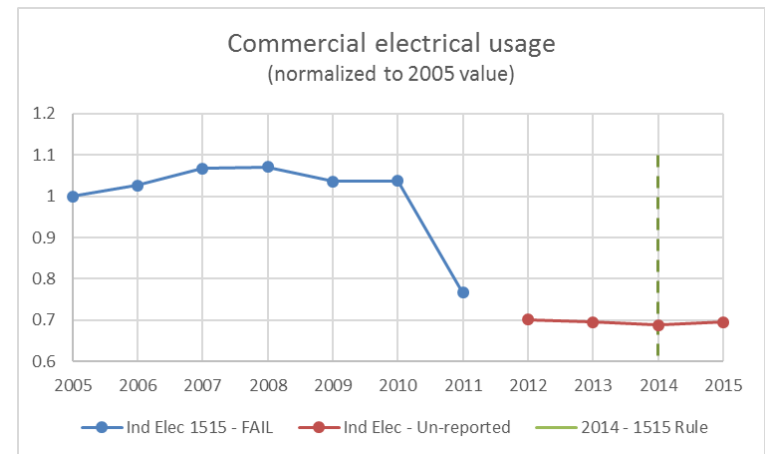
“The 15/15 rule requires that any aggregated information provided by the Utilities must be made up of at least 15 customers and a single customer’s load must be less than 15 percent of an assigned category. If the number of customers in the complied data is below 15, or if a single customer’s load is more than 15 percent of the total data, categories must be combined before the information is released. The Rule further requires that if the 15/15 Rule is triggered for a second time after the data has been screened once already using the 15/15 Rule, the customer be dropped from the information provided. If Industrial Electric usage fails the 15/15 rule once, the usage is combined with Commercial Electric. If it fails the 15/15 rule yet again, the Industrial Usage is omitted altogether.”

- PG&E modified how the rule is applied rule once more in 2013



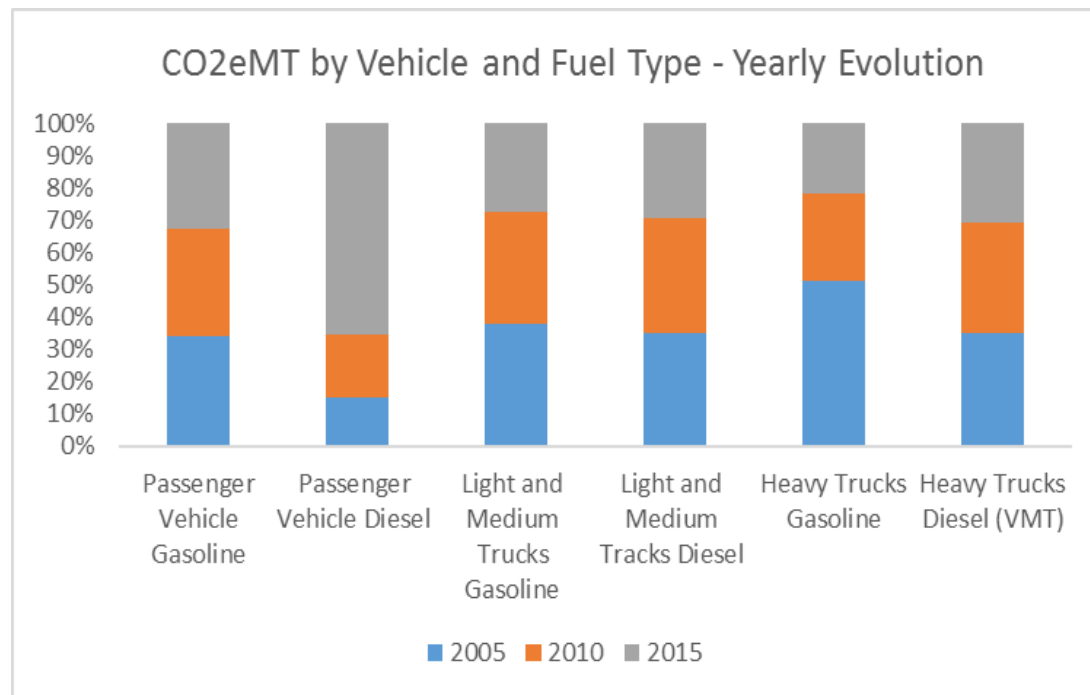
How is Martinez impacted?

- Data measured and reported differently (withheld from being reported)
- Created inconsistencies in the GHG results - “artificial” reduction
- Cities are fighting back!

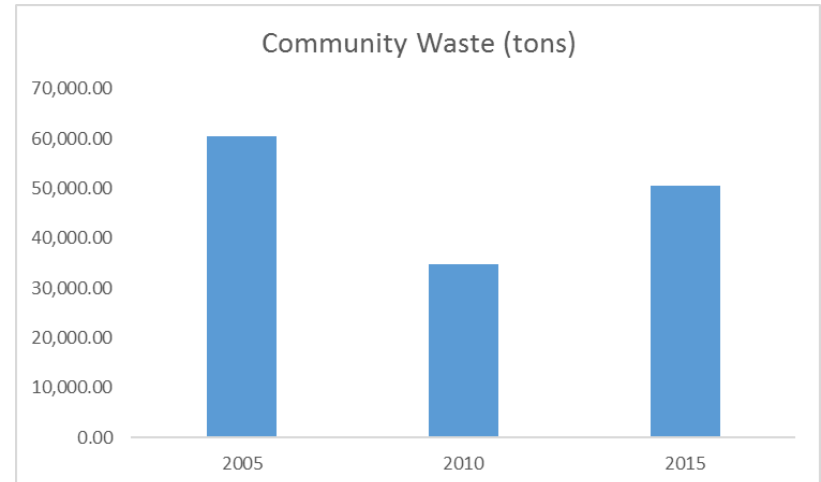
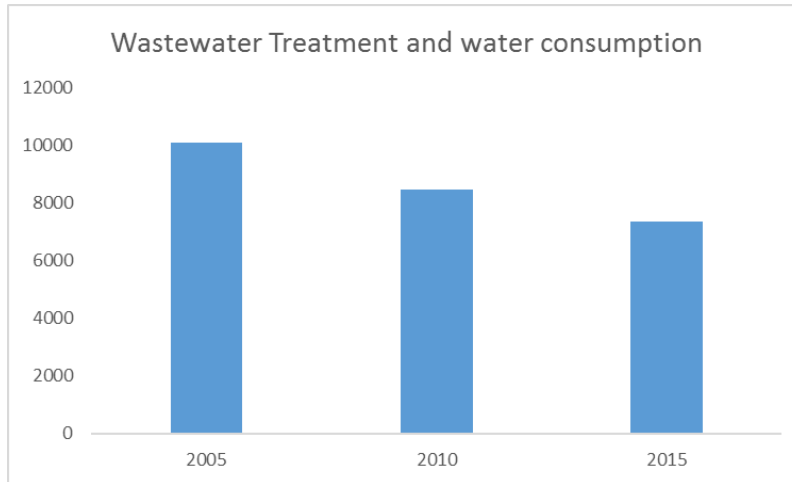
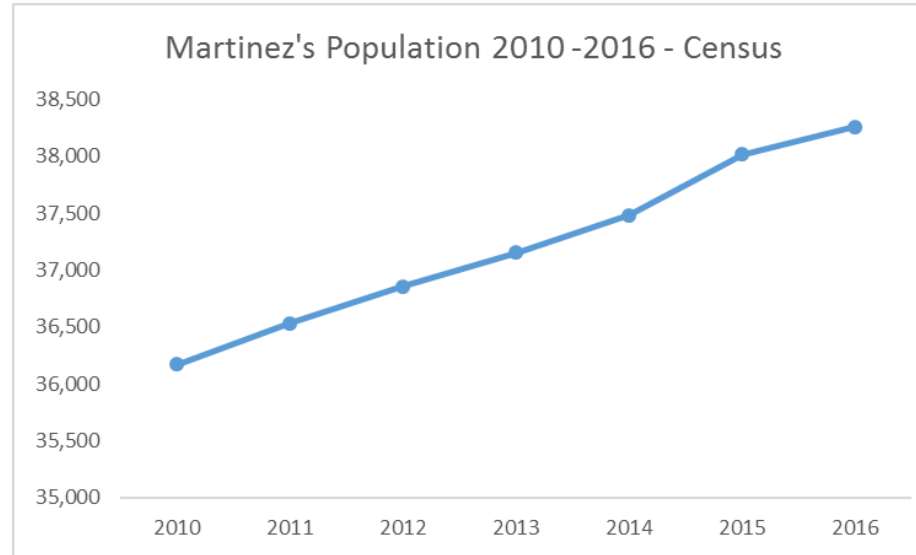


Transportation Sector

- Data from Metropolitan Planning Commission
 - Uses a Land Use Model to estimate travel demand

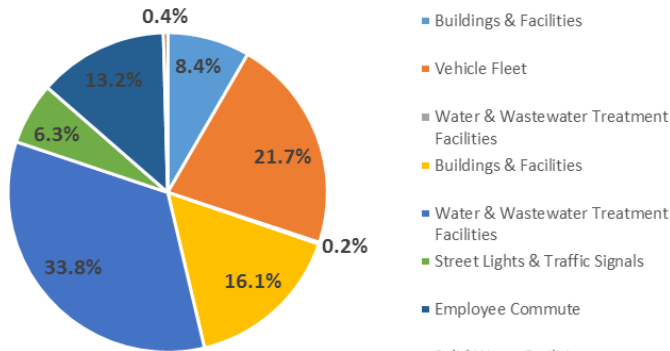


Water, Wastewater and Solid Waste

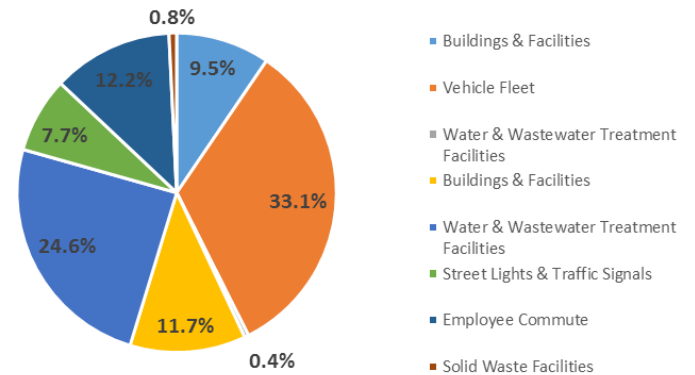


Municipal Inventories

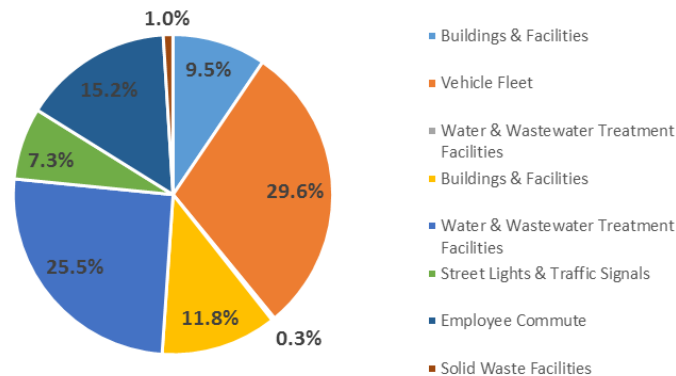
Municipal Inventories 2005



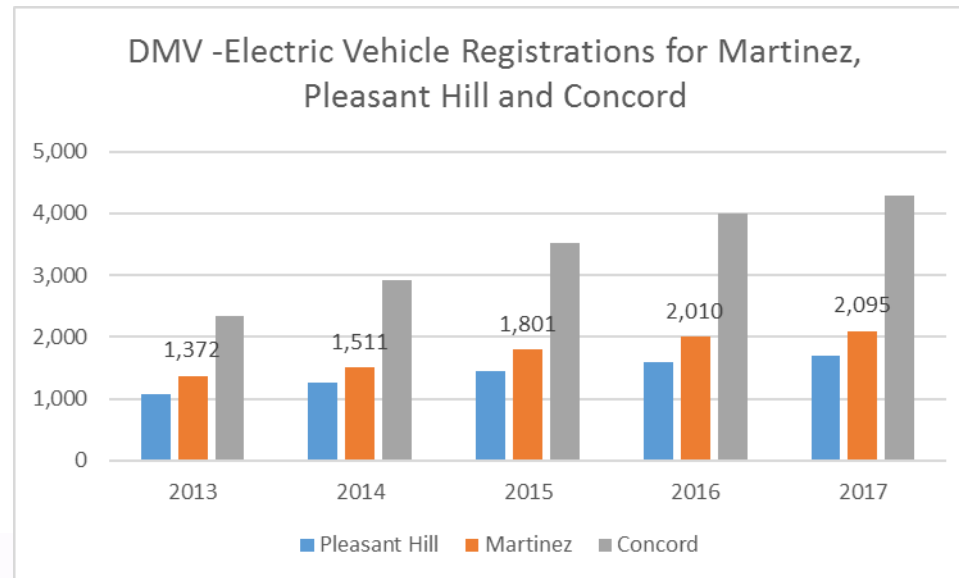
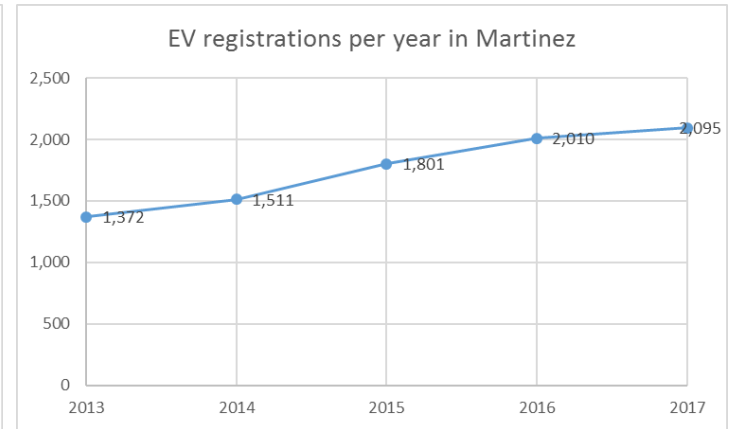
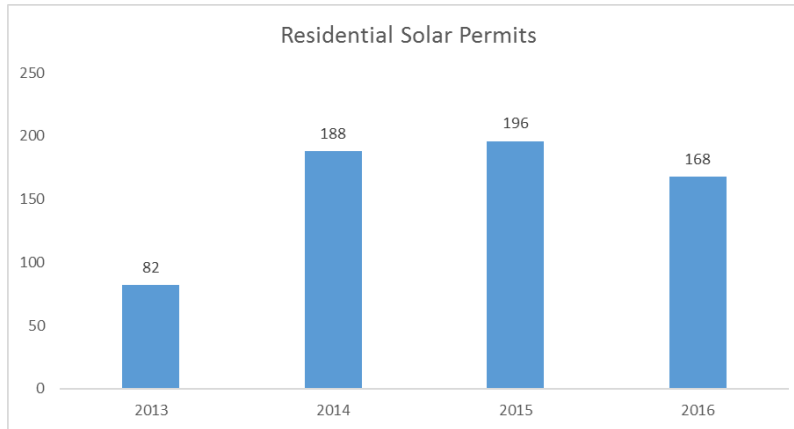
Municipal Inventories 2010



Municipal Inventories 2015



Community-wide Actions with Big Impact on Lowering GHG's



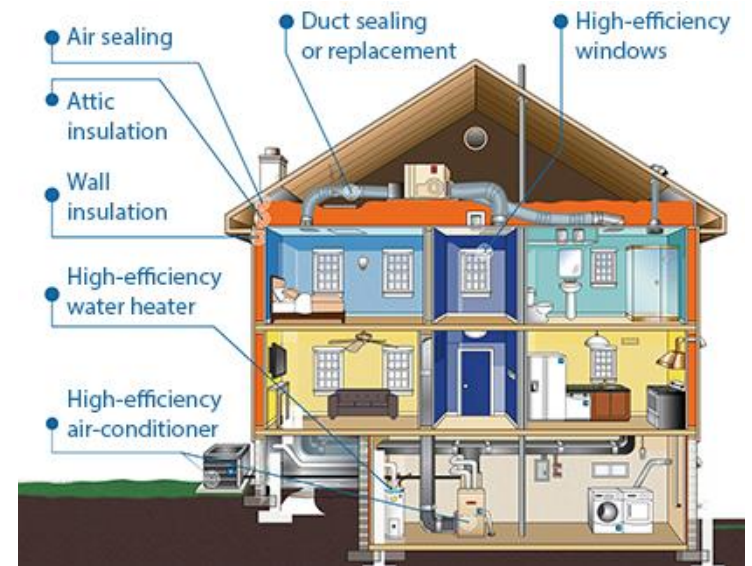
Home Energy Efficiency – BayRen Program

Home Upgrade Program for Martinez

- 76 projects completed / paid out (4 projects still under construction. and 1 in payment review)
- 47,195.79 total kWh savings
- 7,546.95 total Therms savings
- \$192,950 paid out in incentives

Advanced Home Upgrade for Martinez

- 11 projects completed / paid out
- 67,713.83 total kWh savings
- 6,101 total Therms savings
- \$47,834.88 paid out in incentives



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California Youth Energy Center

- Over 800 Green House calls for residents 2014-2017
- Cumulative reductions:
 - ≈ 140,000 kWh, 793 Therms, 3 million gallons
 - ≈ 100 metric tons of CO₂ prevented from reaching the atmosphere



Municipal Operations Projects with Big Impacts on GHG's and Operational Costs



- City Hall HVAC
- Single-pane window replacements



Consider Green Vehicle Purchasing for the City



Explore the cost benefits of
a solar project



Next Steps for CAP

- Martinez has a new Civic Spark Fellow to provide assistance and support on Climate Action Planning
- Continue to refine GHG/add missing data
- Identify and analyze preferred target reduction strategies based on GHG data
 - Electricity Emissions will drop 16% from joining MCE
- Establish goals and objectives with timeframe for implementation

