

CITY OF
HAYWARD
HEART OF THE BAY

Overview of Climate Action Plan

October 3, 2012

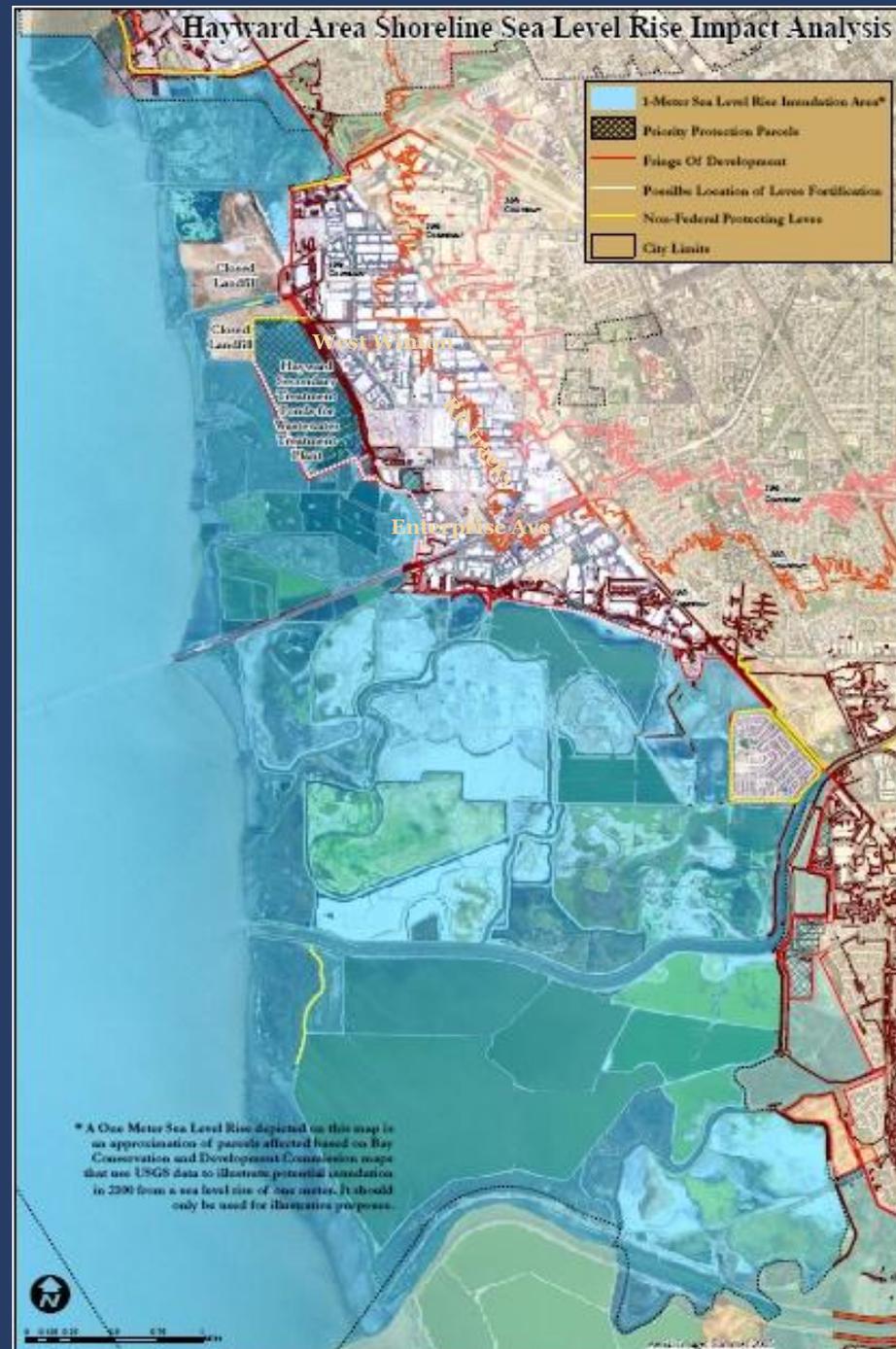
Erik Pearson, *Senior Planner*

Planning Division
Development Services Department



Why did Hayward Adopt a CAP?

- Potential Sea Level Rise
- Implement AB 32
- Lack of Federal Action

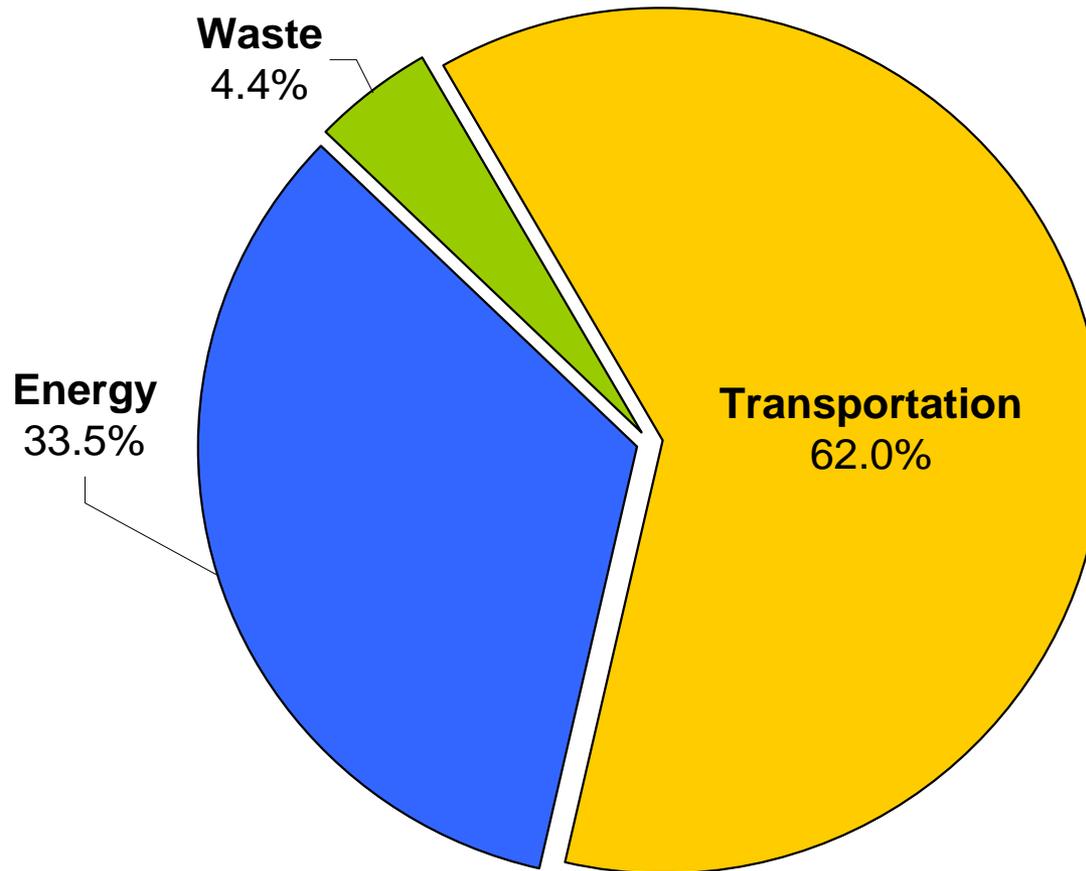


Hayward's Greenhouse Gas Emissions Inventory

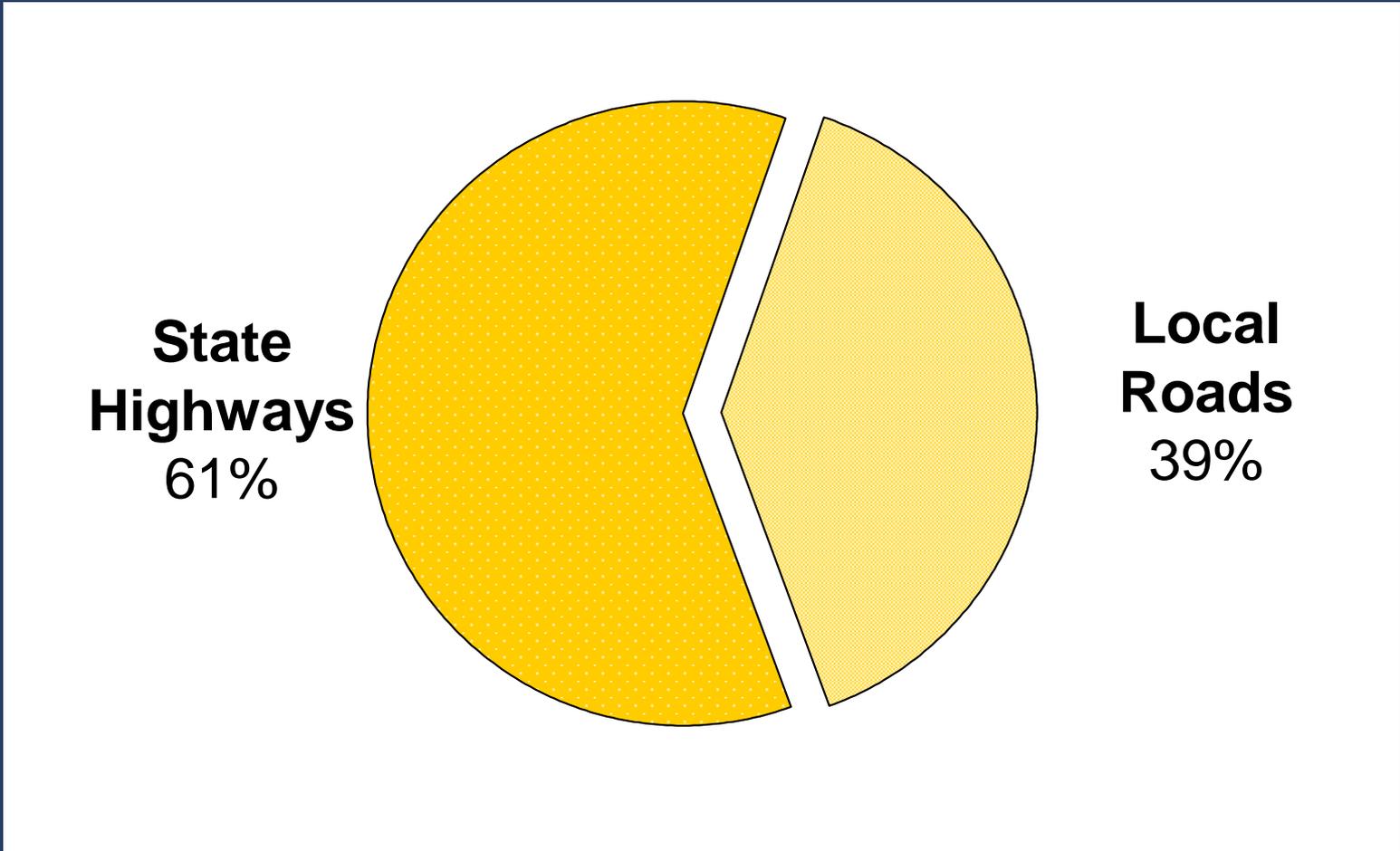
- Hayward's emissions totaled 1,183,274 metric tons of equivalent carbon dioxide gases in 2005.
- Inventory includes emissions data from residential, commercial, industrial, transportation, and waste sectors.

Hayward's Emissions

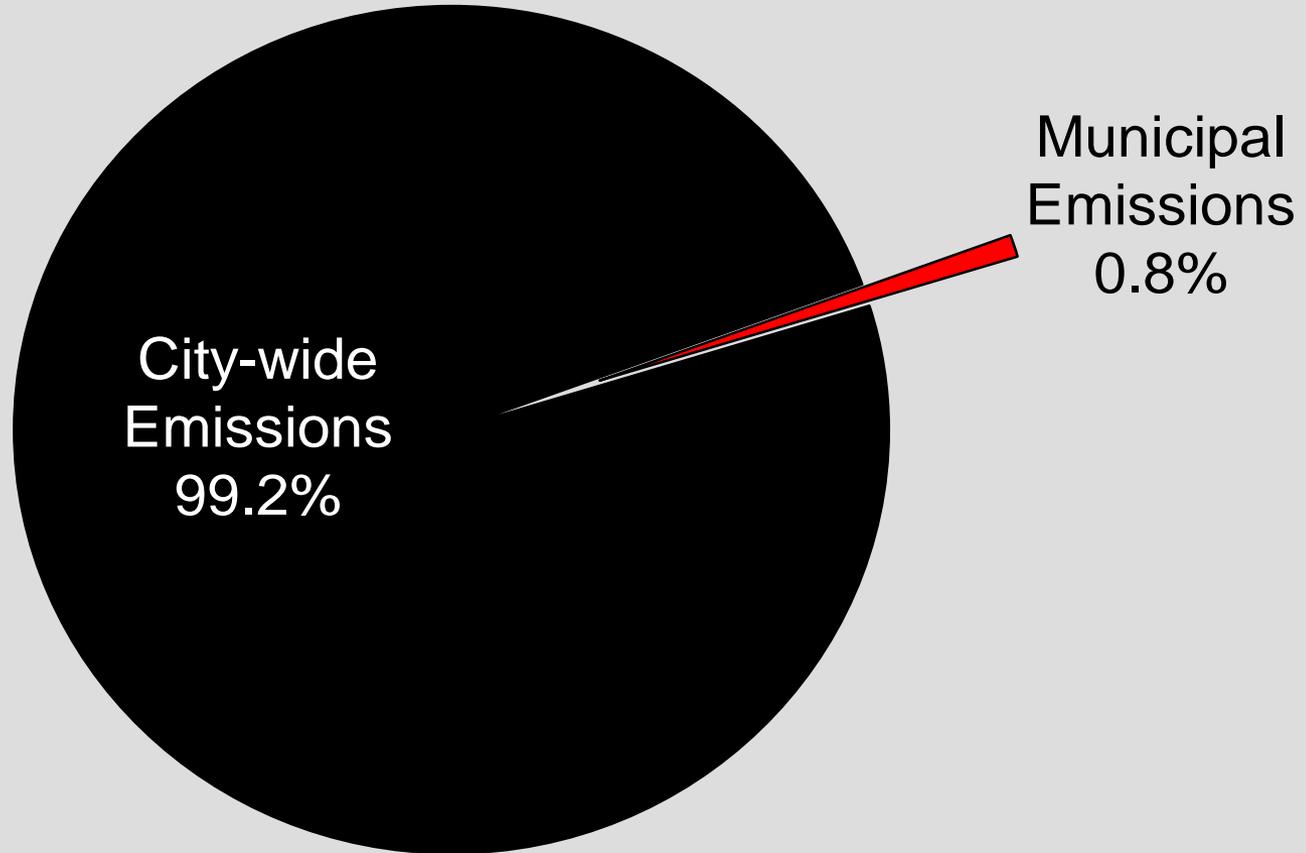
Hayward City-Wide GHG Emissions - 2005
total emissions = 1.18 million metric tons CO₂e



Transportation Emissions



Municipal Emissions



State Reduction Targets

In 2005, Governor Schwarzenegger issued Executive Order # S-3-05, which established a greenhouse gas reduction target of 80 percent below 1990 levels by 2050.

Assembly Bill 32, the California Global Warming Solutions Act of 2006, requires the State's greenhouse gas emissions to be reduced to 1990 levels by 2020.

Hayward's Reduction Targets

- 6.0 percent below 2005 levels by 2013 (interim target)
- 12.5 percent below 2005 levels by 2020
- 82.5 percent below 2005 levels by 2050



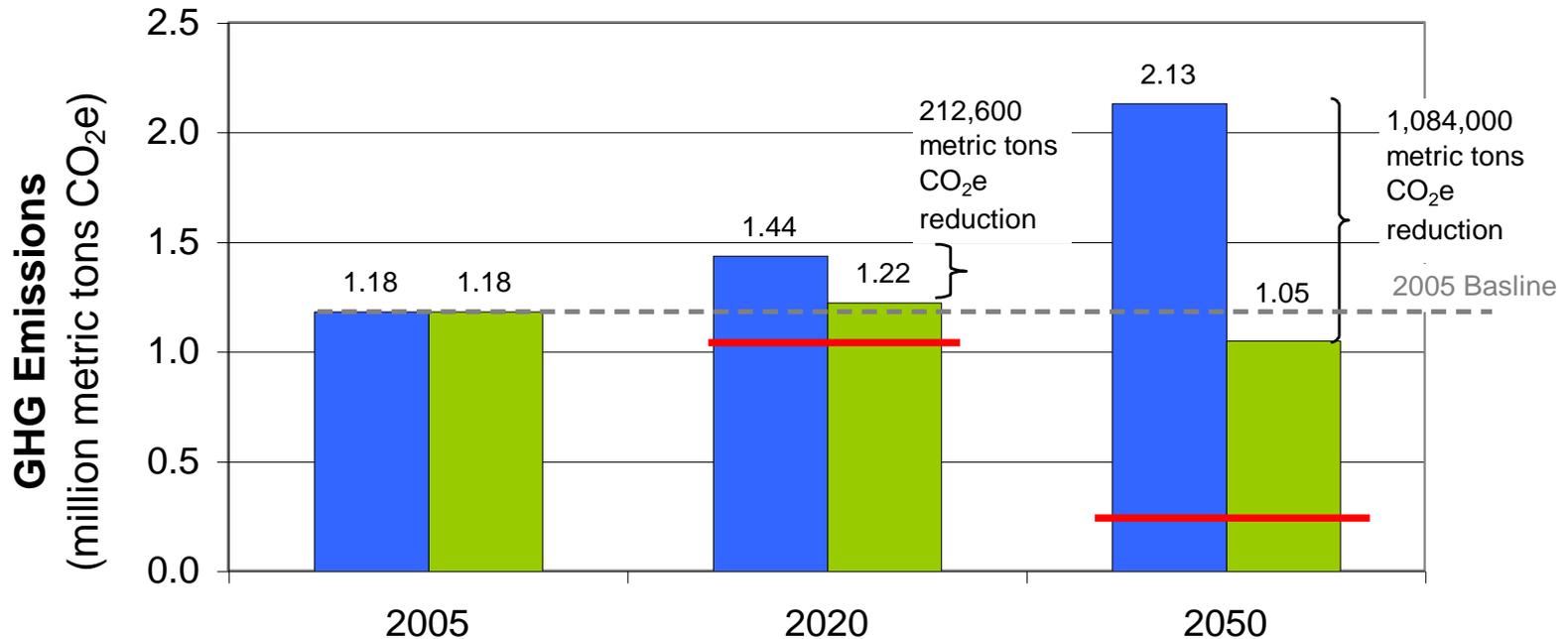
Emissions Reductions Necessary to Meet 2050 Target

- Reduce VMT of passenger vehicles 30%
- Reduce VMT of diesel vehicles (heavy trucks) by 10%
- Increase fuel economy of passenger vehicles to 75 mpg
- Increase fuel economy of diesel vehicles to 11.5 mpg
- Supply 100% of electricity from renewable sources
- Reduce electricity consumption to 65% below BAU
- Reduce natural gas consumption to 50% below BAU
- Eliminate emissions from methane produced from waste

Emissions Projections & Targets

Hayward Emissions Projections With and Without CAP Programs

Scenario 1



■ Estimated emissions with no CAP implementation

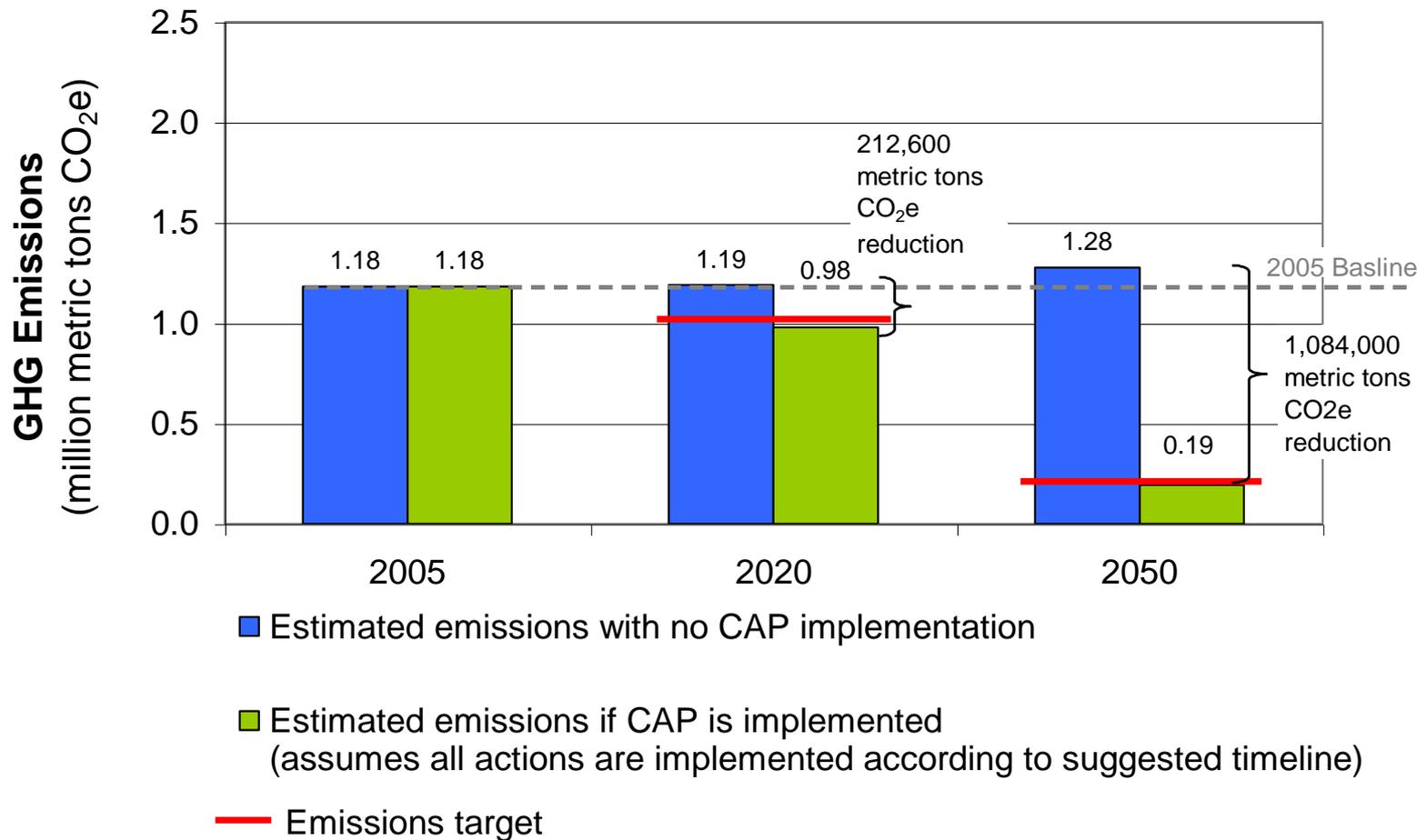
■ Estimated emissions if CAP is implemented
(assumes all actions are implemented according to suggested timeline)

— Emissions target

Emissions Projections & Targets

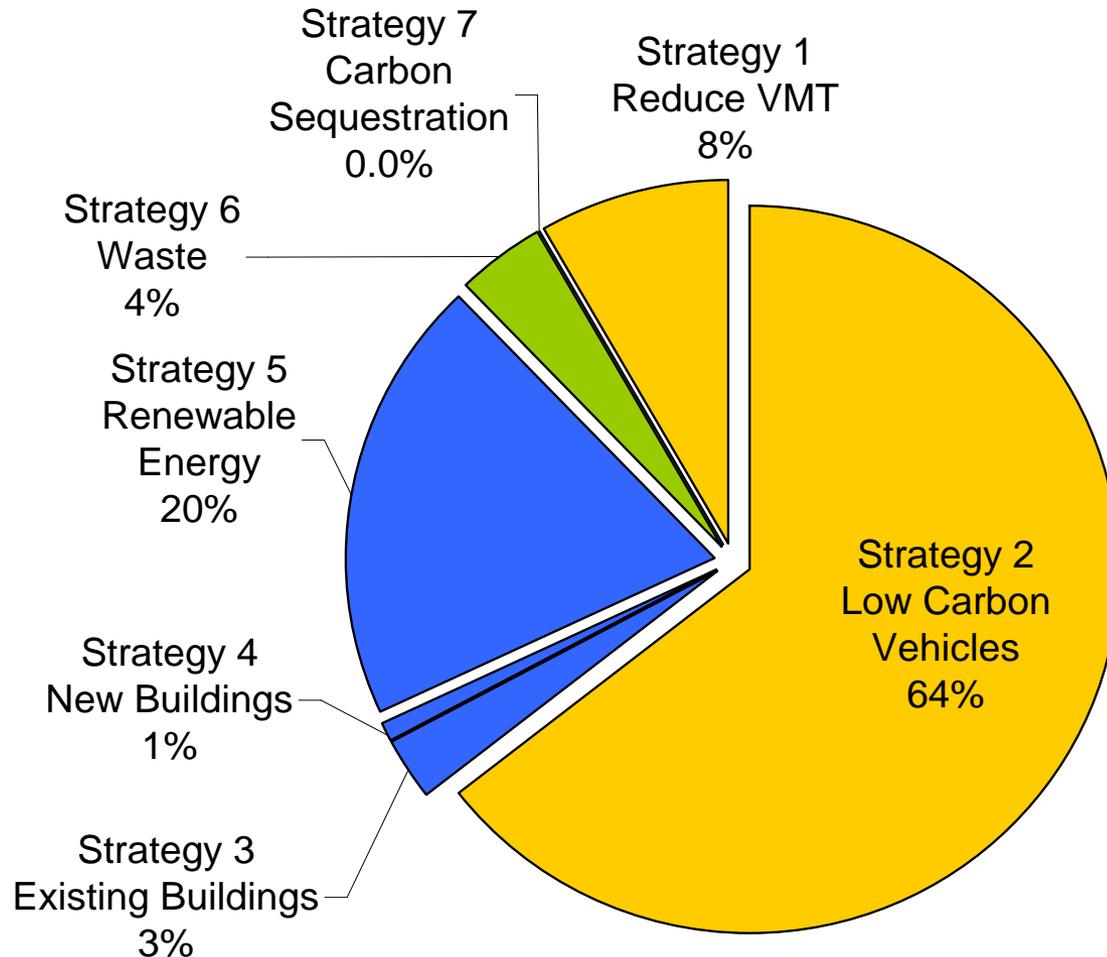
Hayward Emissions Projections With and Without CAP Programs

Scenario 2



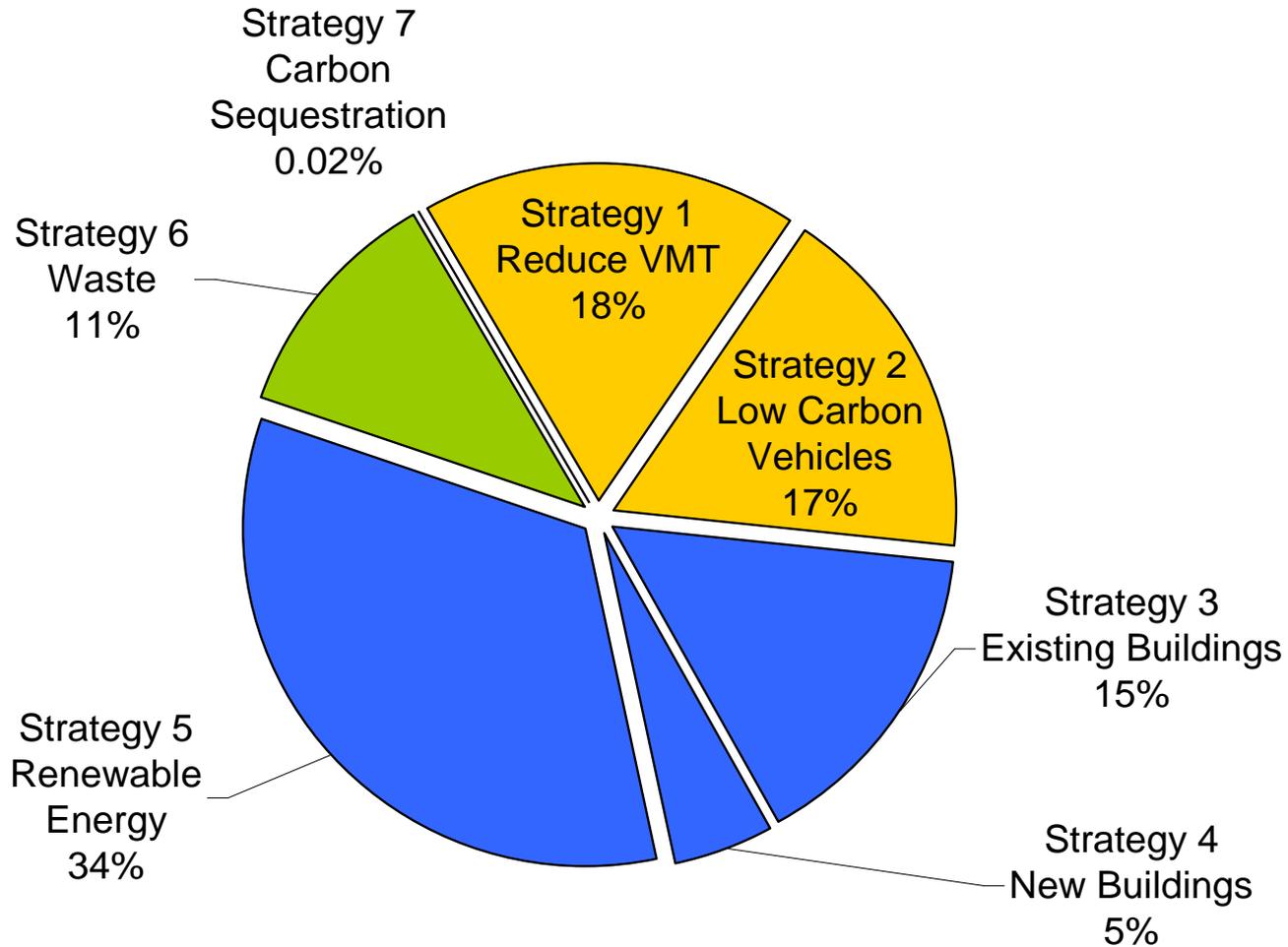
Emissions Reductions

Percent Share of 2020 Emissions Reductions



Emissions Reductions

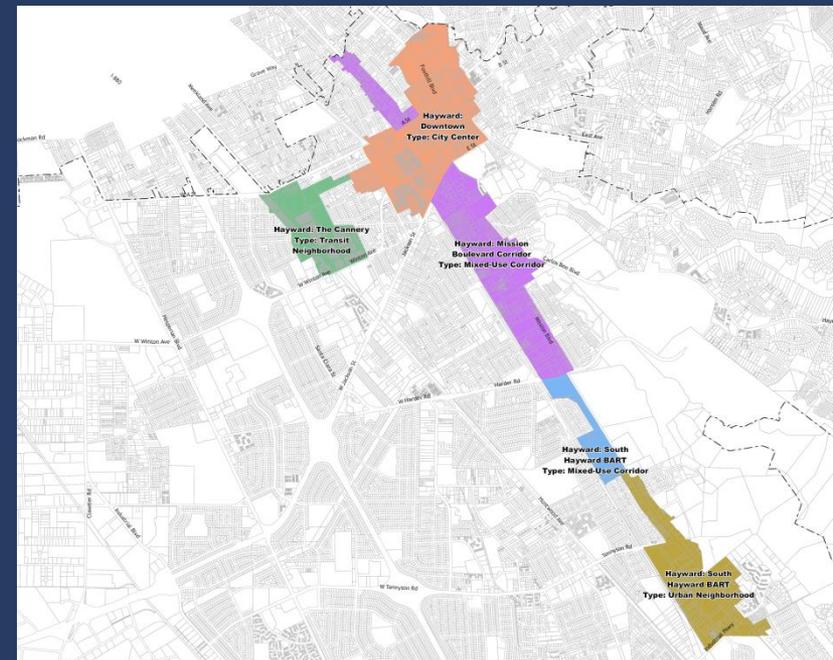
Percent Share of 2050 Emissions Reductions



Strategy 1 – Transportation & Land Use

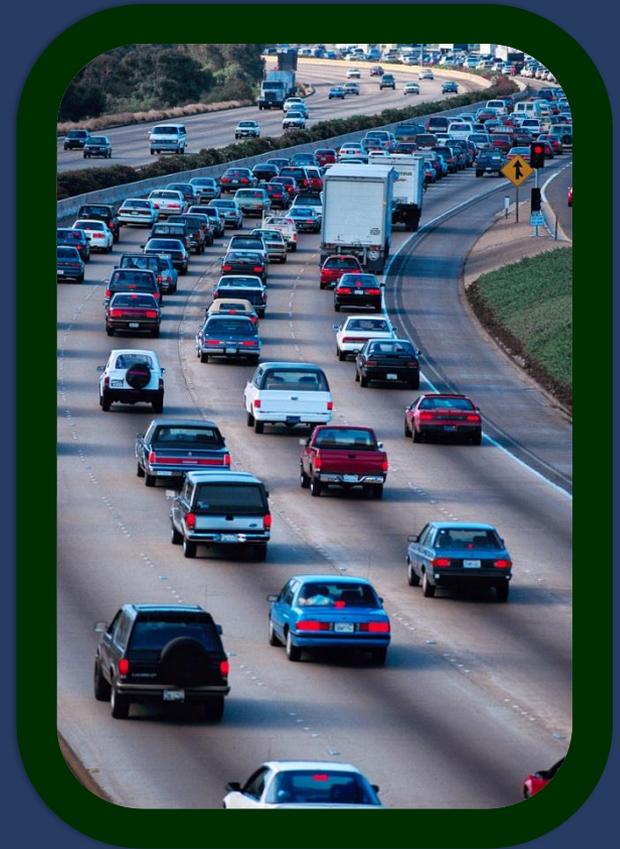
- Transit-Oriented-Development
- Update Circulation Element
- Commuter Benefits
- Affordable Housing

Priority Development Areas



Strategy 2 – Transportation – Decrease GHG

- Incentives to purchase low carbon vehicles
- Advocate for alternative and low emission fuels



Strategy 3 – Energy - Existing Buildings

- Residential Energy Conservation Ordinance (RECO)
- Commercial...CECO
- Home Energy Monitors
- Financing



Strategy 4 – Energy – New Buildings



- **Green Building Ordinance – Private**



USGBC
NORTHERN
CALIFORNIA

- **Green Building Ordinance – Municipal**

Strategy 5 – Renewable Energy

- Add renewable energy requirement to Green Building Ordinance
- Financing
- Community Choice Aggregation



Strategy 6 – Waste & Recycling

- Food Scraps collection began this year
- Commercial Recycling
- Ban certain materials



Strategy 7 – Carbon Sequestration

- Enhance Wetlands
- Plant Trees



Strategy 8 – Adaptation

- **Sea Level Rise**

Adapting to Rising Tides



adaptingtorisingtides.org

March 2010

*Preliminary Study of the Effect of
Sea Level Rise on the Resources
of the Hayward Shoreline*

Prepared for *Hayward Area Shoreline Planning Agency*



Prepared by *Philip Williams & Associates, Ltd.*



Strategy 9 – Engage & Educate Community

- Green Business Program
- Green Portal
- Involve Schools



Prioritizing Actions

Community-wide Actions

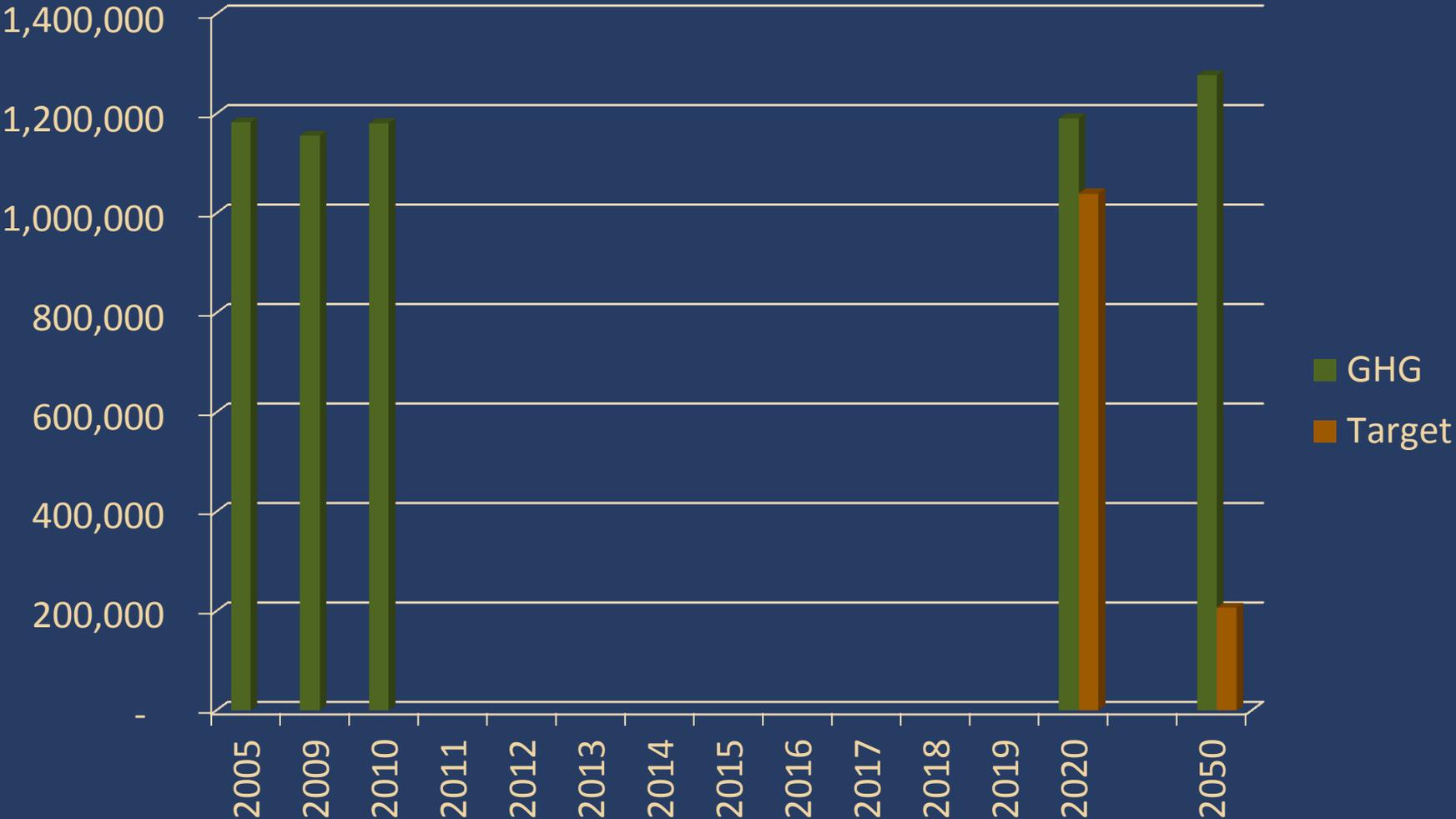
Action Number	Short Description	ease of implementation (weighing factor = 2)					time to full implementation (weighing factor = 1)					potential emissions reductions (weighing factor = 4)				cost (weighing factor = 3)					Priority							
		1. Human resources required to develop and implement program 1 = more than average 2 = average or less than average	2. Does Hayward have direct control over program? 1 = doesn't have direct control 2 = has direct control	3. Does the program have stakeholder support or opposition? 1 = stakeholder opposition 2 = stakeholder support or neutrality	4. How much voluntary community participation is needed? 1 = high level 2 = no or low level	5. Are there additional benefits that might help the program gain stakeholder support? 1 = no 2 = yes	1. Does the city expect that stakeholder opposition will delay the design and implementation of the program? 1 = yes 2 = no	2. How long will it take reach maximum annual emissions savings? 1 = over ten years 2 = five to ten years 3 = five years or less	3. Can the program be developed and initiated within a year? 1 = no 2 = yes	1. Does the city expect that stakeholder opposition will delay the design and implementation of the program? 1 = yes 2 = no	2. How long will it take reach maximum annual emissions savings? 1 = over ten years 2 = five to ten years 3 = five years or less	3. Can the program be developed and initiated within a year? 1 = no 2 = yes	Community-wide Actions What are the estimated emissions reductions in 2050? 1 = less than 1,000 MTCO2e 2 = 10,000 - 100,000 MTCO2e 3 = over 100,000 MTCO2e	1. Is long-term funding in place? 1 = no 2 = yes	2. Are there additional investment costs? 1 = yes 2 = no	3. Are administrative costs expected to be relatively large in relation to other actions? 1 = yes 2 = no	4. Will the program result in cost savings to residents, businesses, or the City? 1 = no 2 = yes	unweighted & unweighted score (maximum score = 6)	unweighted & unweighted score (maximum score = 10)	unweighted & unweighted score (maximum score = 20)		unweighted & unweighted score (maximum score = 30)	Community-wide Actions					
Action 1.1	enroll businesses in providing computer benefits programs	2	2	2	1	2	9	9	88	2	1	2	5	7.1	7.1	1	1	3.3	33.3	1	1	1	2	5	6.3	18.9	57.2	36
Action 1.2	enroll businesses in establishing car share / bike-share programs	2	1	1	1	2	7	7	84	1	1	2	4	5.7	5.7	1	1	3.3	33.3	1	2	2	2	7	8.8	26.3	50.3	33
Action 1.3	update parking policies to encourage reduction in vehicle travel	1	2	1	2	1	7	7	84	1	1	2	4	5.7	5.7	1	1	3.3	33.3	1	2	2	1	6	7.5	22.5	58.5	38
Action 1.4	expand transit services to encourage reductions in vehicle travel	1	1	2	2	2	8	8	86	2	1	1	4	5.7	5.7	2	1	6.7	26.7	1	1	1	1	4	5.0	15.0	63.4	30
Action 1.5	continue to implement bike master plan	2	2	2	1	2	9	9	88	2	1	2	5	7.1	7.1	1	1	3.3	33.3	1	1	2	1	5	6.3	18.9	57.2	37
Action 1.6	Develop and implement pedestrian master plan	1	2	2	1	2	8	8	86	2	1	2	5	7.1	7.1	1	1	3.3	33.3	1	1	2	1	5	6.3	18.9	58.2	39
Action 1.7	update the Circulator Element of the General Plan to evaluate expansion of appropriate modes of transit	2	2	2	1	2	9	9	88	2	1	2	5	7.1	7.1	2	2	6.7	26.7	1	1	2	1	5	6.3	18.9	70.6	25
Action 1.8	prioritize traffic flow management practices to reduce idling time	1	1	2	2	2	8	8	86	2	2	2	7	10.0	10.0	2	1	6.7	26.7	1	1	2	1	5	6.3	18.9	71.4	22
Action 1.9	encourage high density, mixed-use, smart-growth development in areas near public transit stations	2	1	2	1	2	8	8	86	2	1	2	5	7.1	7.1	2	2	6.7	26.7	1	1	2	1	5	6.3	18.9	68.6	27
Action 1.10	align zoning policies to minimize vehicle travel	2	2	2	2	2	10	10	20	2	1	2	5	7.1	7.1	2	2	6.7	26.7	1	2	2	1	6	7.5	22.5	76.3	9
Action 1.11	increase availability of affordable housing for people employed in Hayward	2	2	2	2	2	10	10	20	2	2	1	6	8.6	8.6	2	2	6.7	26.7	1	1	2	1	5	6.3	18.9	74.0	13
Action 1.12	encourage filling local jobs with local residents	1	1	2	2	2	8	8	86	2	1	1	4	5.7	5.7	2	2	6.7	26.7	1	1	1	1	4	5.0	15.0	63.4	31
Action 2.1	provide incentives for low-carbon vehicles and low-carbon fuels	2	2	1	2	2	9	9	88	1	1	2	4	5.7	5.7	3	1	10.0	40.0	1	1	1	2	5	6.3	18.9	82.5	5
Action 2.2	collaborate the state and federal government on policies that promote low-carbon vehicles and low-carbon fuels	2	1	2	2	2	9	9	88	2	2	1	5	7.1	7.1	3	1	10.0	40.0	1	2	1	1	5	6.3	18.9	83.9	4
Action 3.1	develop and implement Residential Energy Conservation Ordinance for single-family homes	1	2	1	2	2	8	8	86	1	1	2	4	5.7	5.7	2	2	6.7	26.7	1	2	1	2	6	7.5	22.5	70.9	23
Action 3.2	develop and implement Residential Energy Conservation Ordinance for multiple-family homes	1	2	1	2	2	8	8	86	1	1	2	4	5.7	5.7	2	2	6.7	26.7	1	2	1	2	6	7.5	22.5	70.9	24
Action 3.3	develop and implement Commercial Energy Conservation Ordinance	1	2	1	2	2	8	8	86	1	1	2	4	5.7	5.7	3	3	10.0	40.0	1	2	1	2	6	7.5	22.5	84.2	3
Action 3.4	actively participate in low-income weatherization programs	3	1	2	2	2	10	10	20	2	2	2	6	8.6	8.6	2	2	6.7	26.7	2	2	2	2	8	10.0	30.0	85.2	2
Action 3.5	promote a voluntary commitment for businesses and residents to reduce energy consumption	2	2	2	1	1	8	8	86	2	1	2	5	7.1	7.1	2	2	6.7	26.7	1	2	2	2	7	8.8	26.3	76.1	10
Action 3.6	promote use of home energy monitors	1	2	2	1	1	7	7	84	2	2	2	6	8.6	8.6	2	2	6.7	26.7	1	1	2	2	6	7.5	22.5	71.7	21
Action 3.7	energy efficiency financing program for single-family homes	2	2	2	1	2	9	9	88	2	1	2	5	7.1	7.1	2	2	6.7	26.7	2	1	2	2	7	8.8	26.3	78.1	6
Action 3.8	offer energy efficiency financing program for	2	2	2	1	2	9	9	88	2	1	2	5	7.1	7.1	2	2	6.7	26.7	2	1	2	2	7	8.8	26.3	78.1	7

Top 5 Actions

- Action 3.9 Energy Efficiency Financing program for commercial buildings
- Action 3.3 Commercial Energy Conservation Ordinance
- Action 3.7 Energy efficiency financing program for single-family homes
- Action 3.8 Energy efficiency financing program for multiple-family homes
- Action 5.2 Renewable energy financing program for commercial buildings



Measure Progress



Re-Prioritize Actions

Reconsider priorities as CAP is incorporated into the General Plan.



Implementation Challenges

- Residential Energy Conservation Ordinance
- Commercial Energy Conservation Ordinance
- Property Assessed Clean Energy



Possible Topics for 2013 – 1st Half

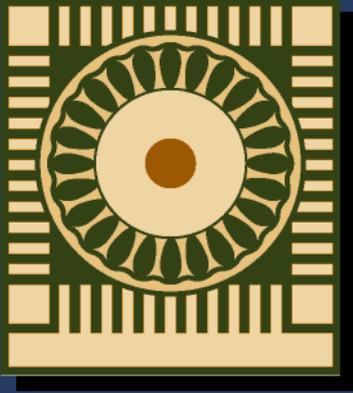
CAP Action Number	Description	Committee Meeting Date
NA	Update on formation of Alameda County Energy Council, a Joint Powers Authority	January 2013
6.2	Waste Reduction Report – Annual Update on Recycling Programs	
3.7, 3.8, 3.9 5.1 & 5.2	Financing for Energy Efficiency and Renewable Energy	
9.2, 9.3	Update on City partnerships with PG&E	
NA	Annual Update on CAP Implementation & Consideration of New Priorities for CAP actions in General Plan	April 2013
4.1, 4.2, 5.3	Revisions to Green Building Ordinance	



Possible Topics for 2013 – 2nd Half

CAP Action Number	Description	Committee Meeting Date
4.1, 4.2, 5.3	Revisions to Green Building Ordinance	July 2013
5.5	Update on Renewable Energy Generation at City Facilities	
6.4	Update on Plastic Bag Ban	
6.5	Mandatory recycling ordinance for multi-family residential and commercial properties	
1.4, 1.6, 1.7	Draft Transportation Policies for General Plan Update	October 2013
6.1, 6.2, 6.3, 6.6, 6.7	Annual Waste Reduction Report	
1.1	Assist businesses in providing commuter benefits programs	
3.1, 3.2, 3.3	Update on the Building Asset Rating Pilot Study with SStopWaste.org	





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