

**Alameda County
(Unincorporated areas)
Community Climate Action Plan**

Draft Measures – an opportunity to comment

Public Workshops

1st and 2nd December, 2009

Agenda – Feedback on proposed measures

6:00 – 6:25 Plenary introductory presentation

6:25 – 6:40 General Q&A Session

6:40 – 7:00 Breakout Session 1

7:05 – 7:25 Breakout Session 2

7:30 – 7:50 Breakout Session 3

7:50 – 8:00 Closing/Individual Q&A Session

Alameda CAP Presentation

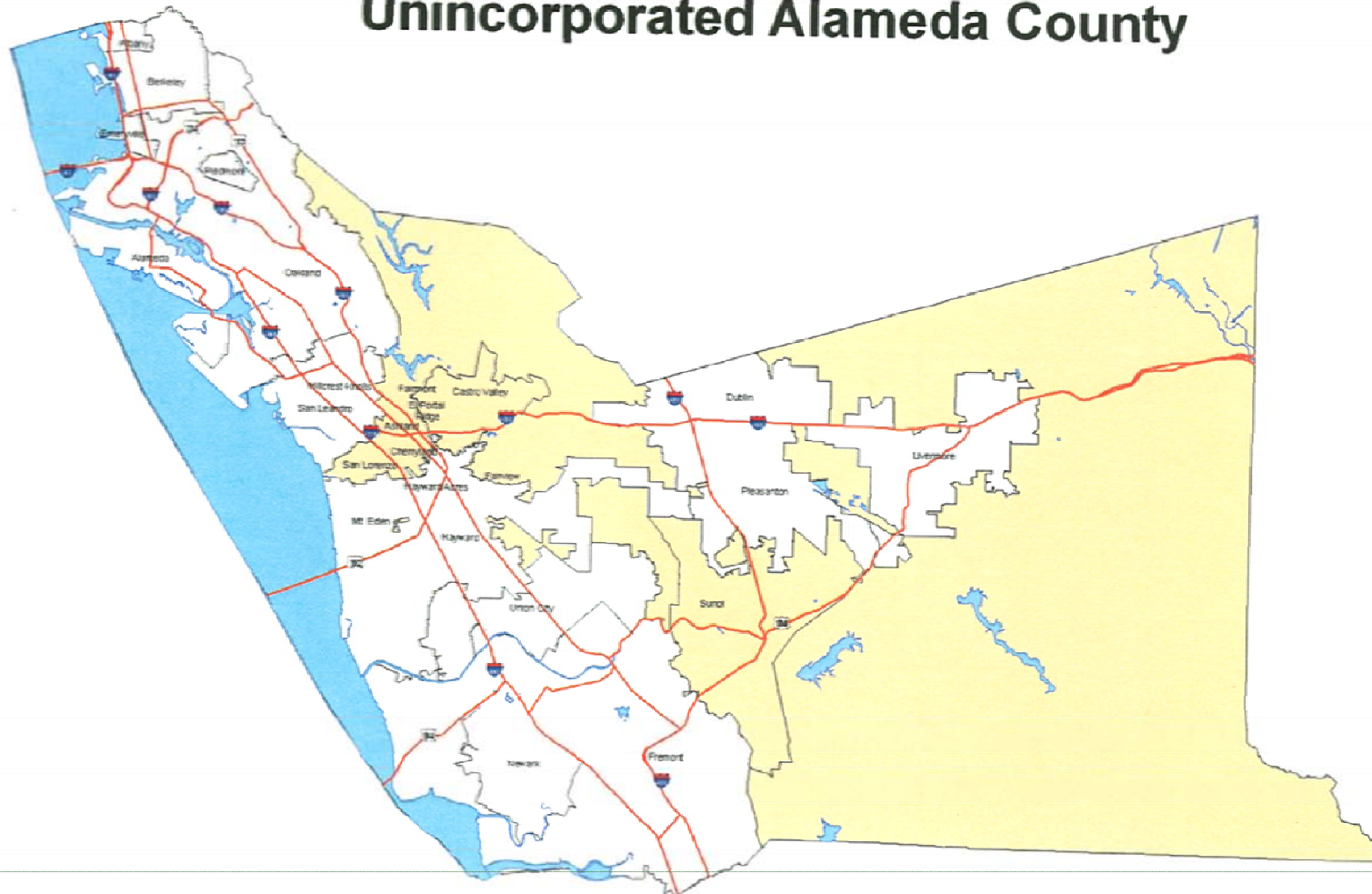
- Recap on the CAP process
- Climate Change and the local Context
- Selected Climate Action Measures and survey responses
 - Transportation &
 - Buildings & Energy Use
 - Land Use
 - Waste & Water
 - Green Infrastructure



What is Unincorporated County?

Figure 1

Unincorporated Alameda County



N
— Highways
— Unincorporated Areas

CAP Preparation Schedule

- CAP Preparation Began – June 2009
- Public Outreach and Survey – August - November 2009
- Public Workshops – September & December 2009
- Analysis and Selection of Draft CAP Measures – Sept-Nov 2009
- Release of Draft CAP – Dec 2009
- Public Review Period – Dec 09 – Jan 10
- Draft CAP Public Hearings – early 2010
- Adoption of CAP by County Supervisors – March 2010

CAP Preparation Schedule

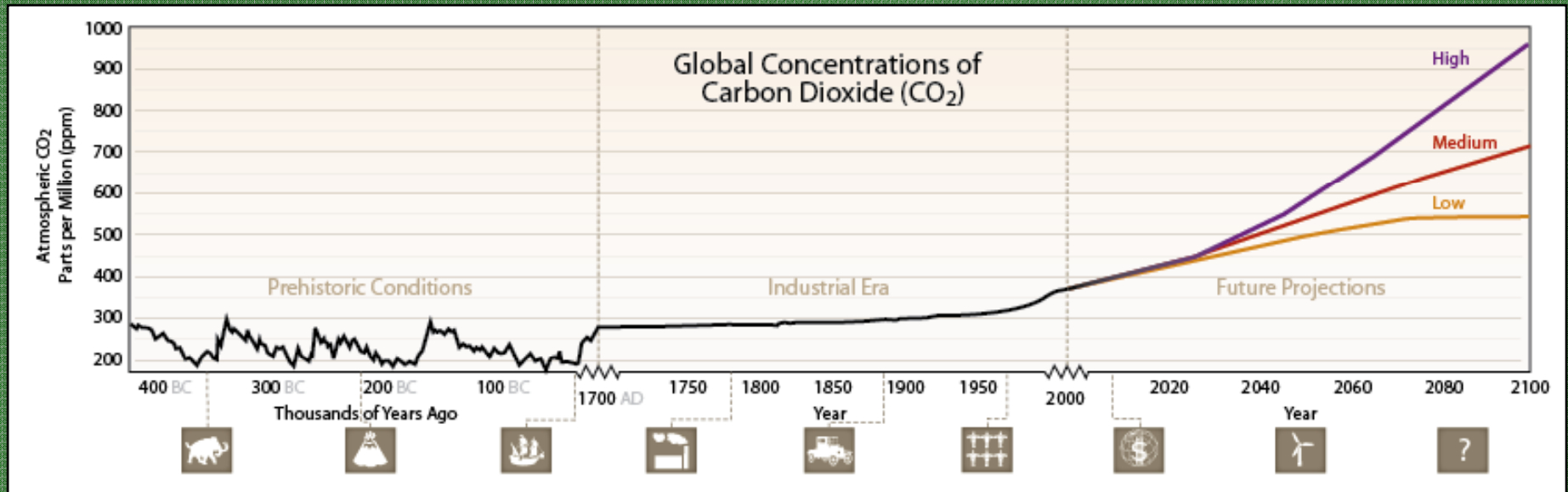
- CAP Preparation Began – June 2009
- Public Outreach and Survey – August - November 2009 (329 respondents, 5 pages of comments/suggestions)
- Public Workshops – September & December 2009
- Analysis and Selection of Draft CAP Measures – Sept-Dec 2009
- Release of Draft CAP – Dec 2009
- Public Review Period – Dec 09 – Jan 10
- Draft CAP Public Hearings – early 2010
- Adoption of CAP by County Supervisors – March 2010

County Municipal CAP

- Being prepared separately by GSA
- Working in collaboration with Community CAP
- Overarching principles and commitments plus measures
- Initial plan in draft
- Formal review and adoption early 2010

Climate Change



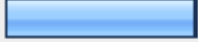

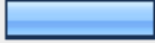
Increasing Greenhouse Gases



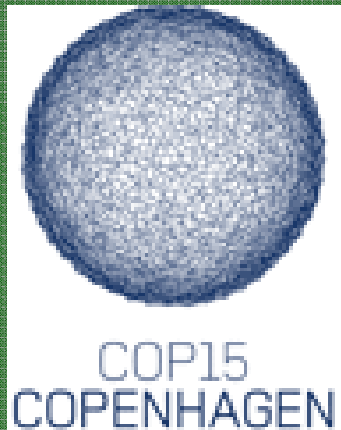
Atmospheric greenhouse gas concentrations are higher than they have been in the last 400,000 + years

Survey Results

25. What is your level of concern about climate change? (Select one.)

			Response Percent	Response Count
Not at all			6.7%	21
A little			6.4%	20
Somewhat			21.2%	66
Very Concerned			49.0%	153
Extremely Concerned			16.7%	52
			<i>answered question</i>	312
			<i>skipped question</i>	17

Climate Change – Copenhagen Dec 09



- Next United Nations climate change conference to establish global carbon reduction goals
- Governments to try and reach agreement on a comprehensive, fair and effective deal on climate change
- EU commissioner is urging a 30% emission reduction by Europe
- Obama expected to announce a commitment to a 17% reduction from 2005 levels by US by 2020

Climate Change

Local Effects

Decreasing California Spring Snowpack

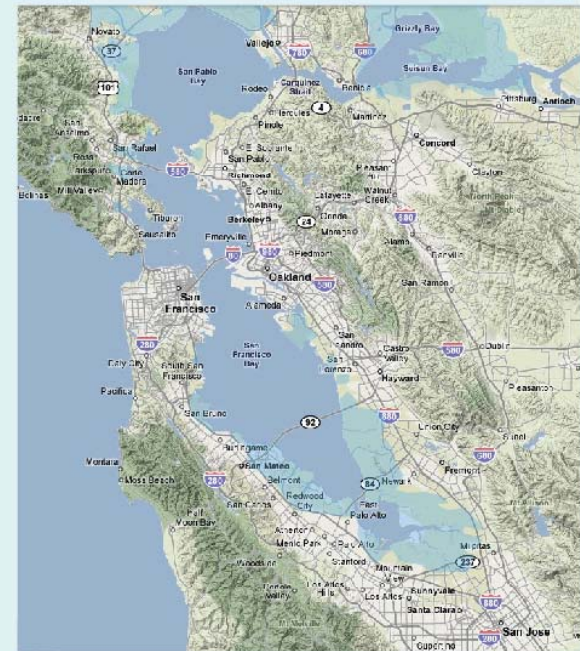
Historical Average
(1961–1990)



Future Projections (2070–2099)
Medium Warming Scenario



Sea Level Rise in SF Bay Area

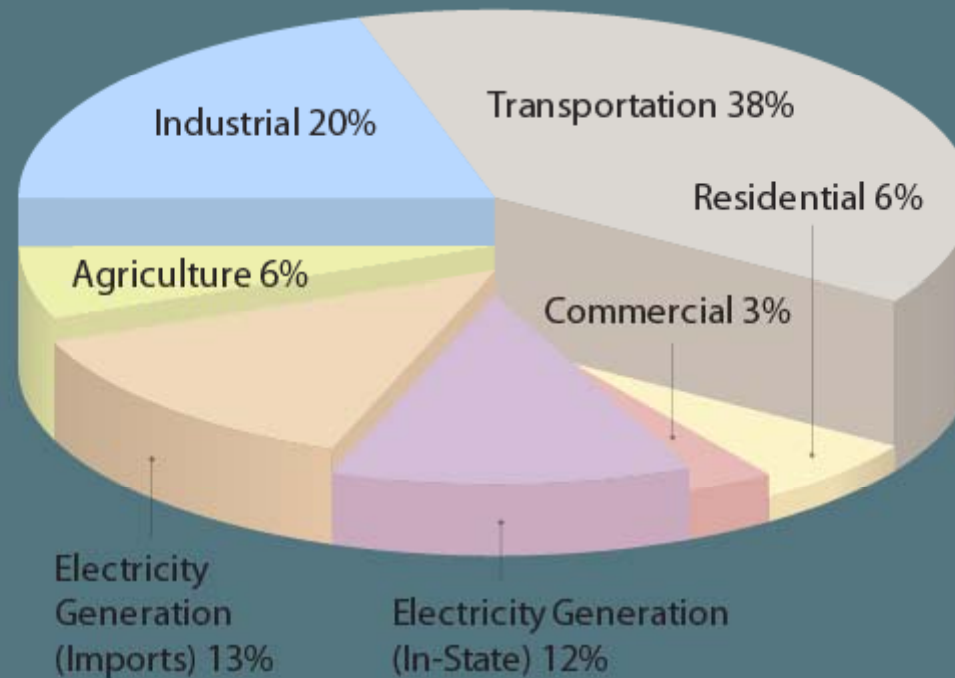


Areas Likely to be Inundated
by 36-Inch Sea Level Rise

The California Context

State-Wide GHG Emissions Inventory

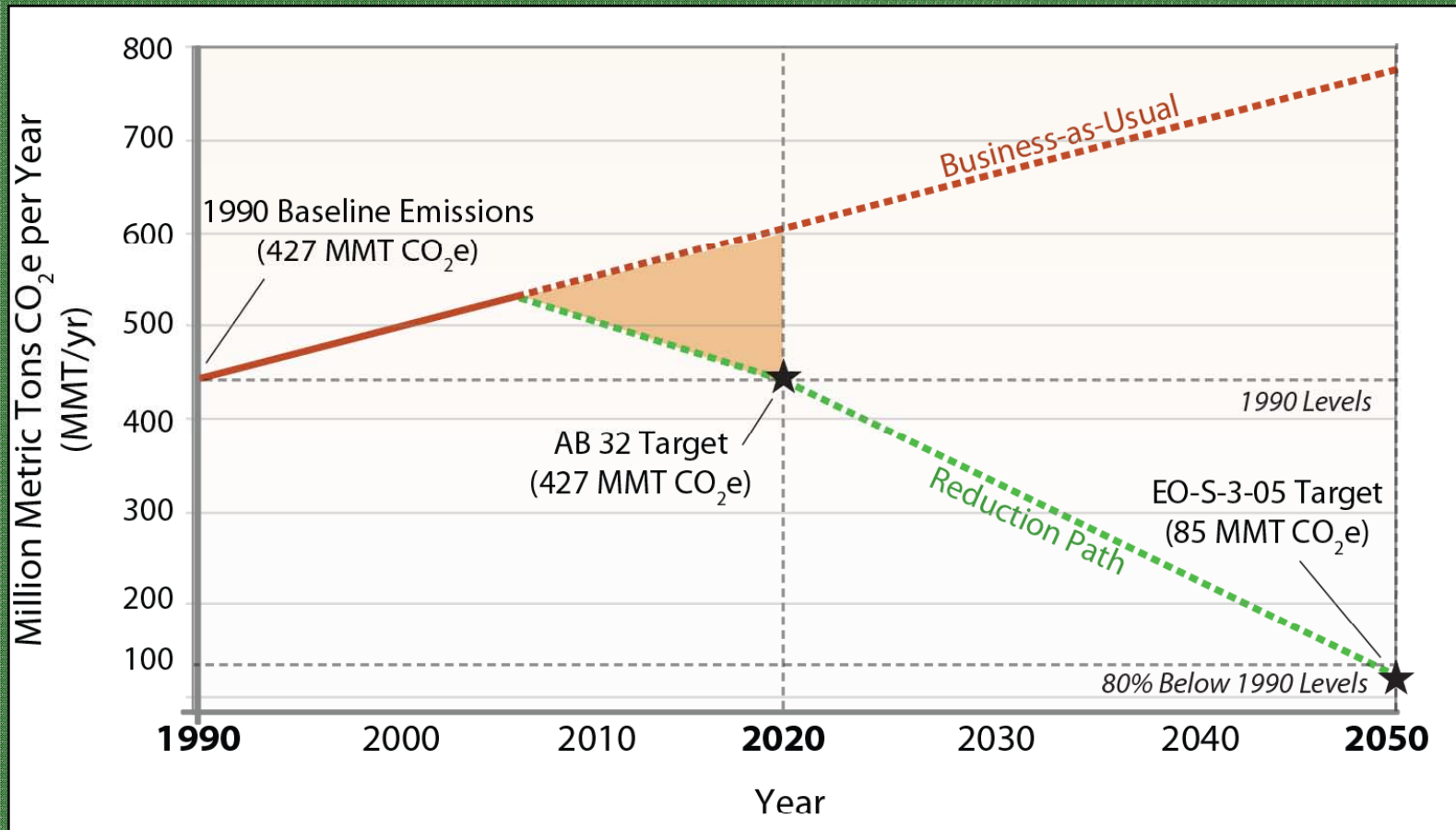
California Greenhouse Gas Emissions
by Sector in 2005



Source: CEC, 2008

The Context

State-Wide Emissions, Projection, and Targets



The California Context

Key State Legislation

State of California Global Warming Legislation:

- ▶ California Global Warming Solutions Act - Assembly Bill 32 (AB 32)
Reduce Greenhouse Gas Emissions to 1990 Levels by 2020
- ▶ Executive Order S-3-05 (EO - S-3-05)
Reduce to 80% below 1990 Levels by 2050
- ▶ Senate Bill 375 (2008)
Require regional land use, transportation, and housing plans to comply with regional GHG reduction targets

Climate Action in Alameda County



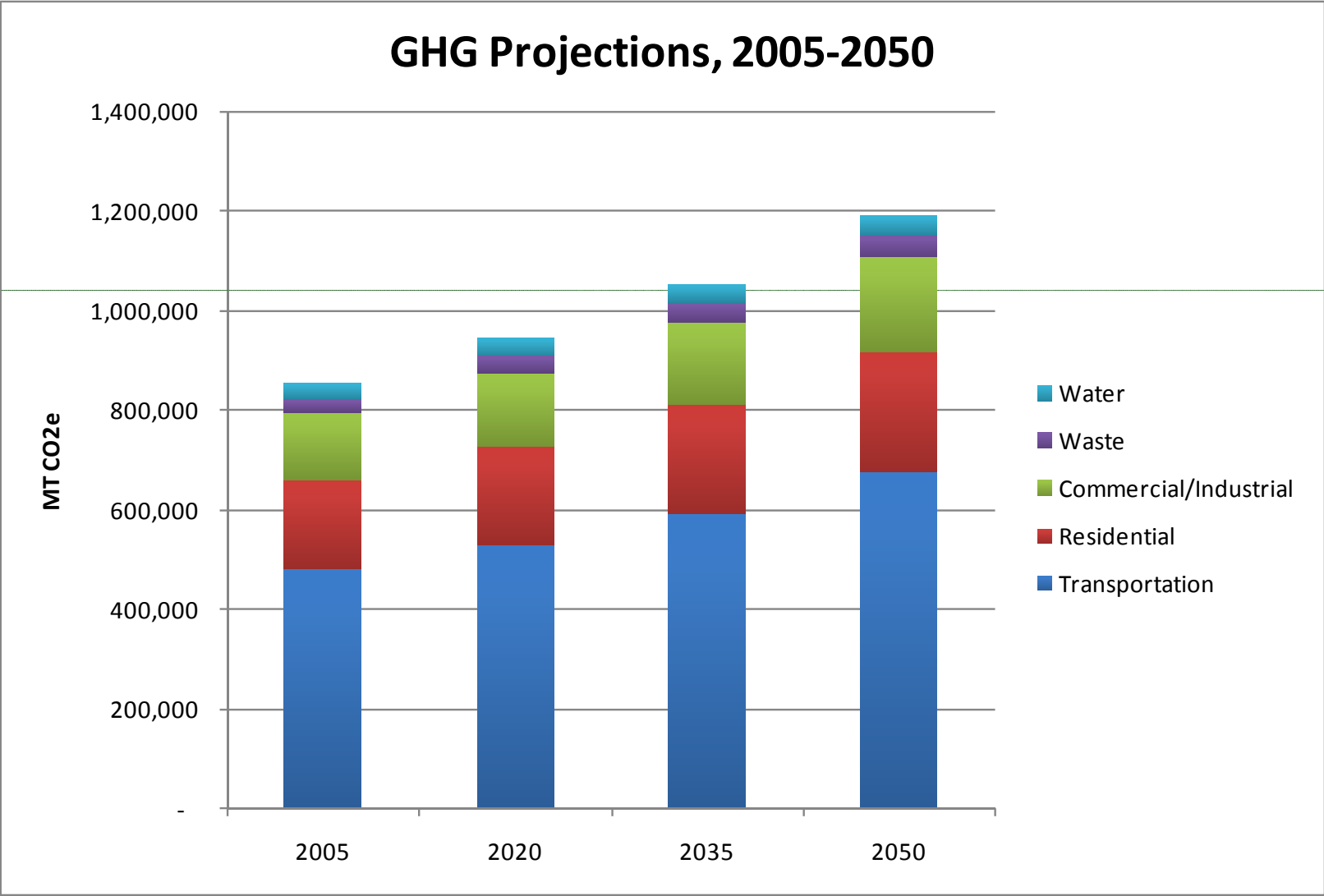
Alameda Unincorporated County GHG Emissions Inventory

**Table II-3.
Alameda County Baseline GHG Emissions and Percent Contributions**

Community Sector	Emissions Baseline	
	Metric Tons CO ₂ e	Percent
Residential Energy Use	179,864	21.0%
Commercial/ Industrial Energy Use	132,768	15.5%
Transportation ¹	480,529	56.2%
Waste	30,419	3.6%
Water Consumption	30,947	3.6%
Total	854,527	100%

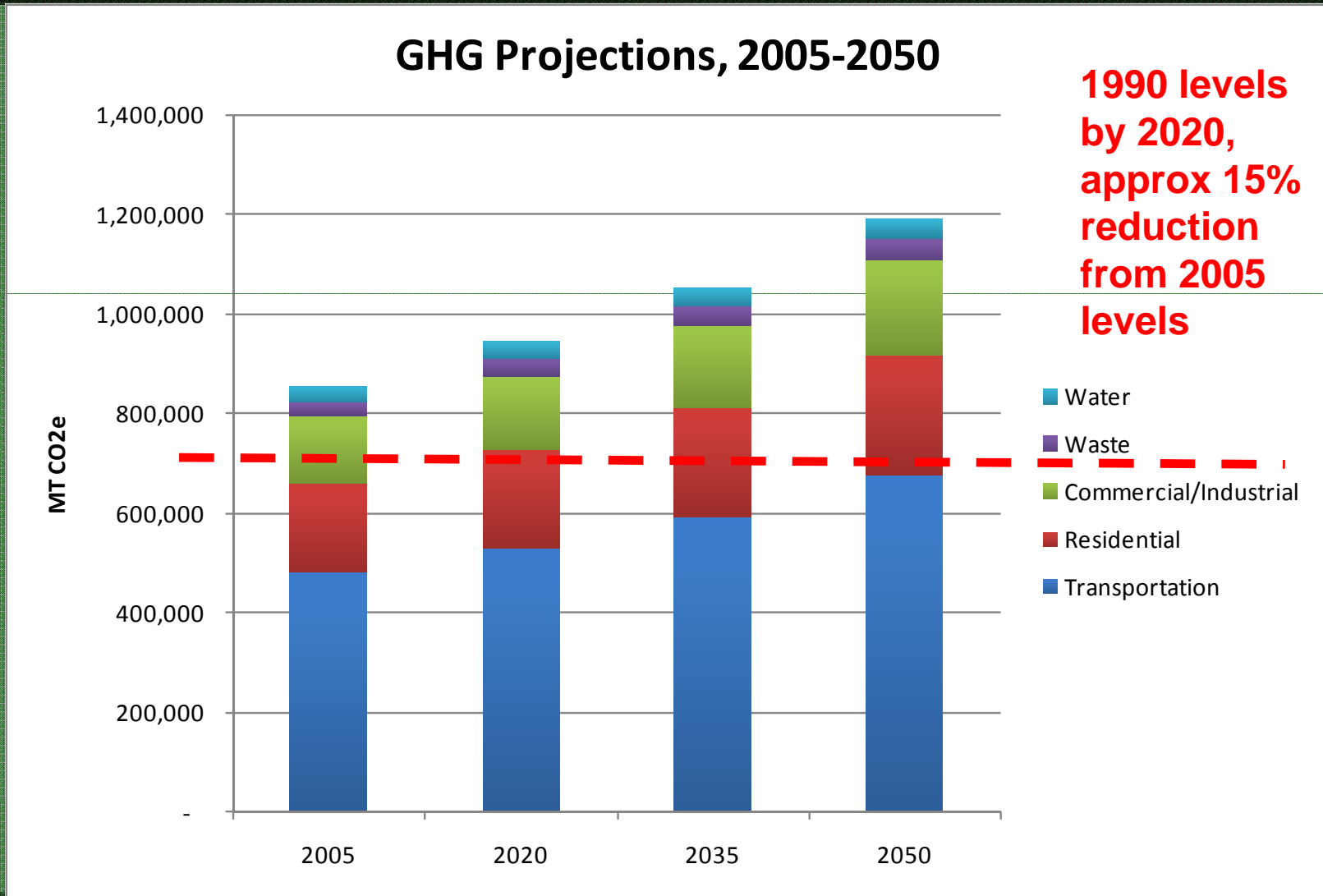
Climate Action in Alameda County

Greenhouse Gas Emissions 2005 to 2020



Climate Action in Alameda County

Greenhouse Gas Emissions 2005 to 2020



Climate Action Plan

Part I: Introduction and context

Part II: Measures



Part III: Implementation

Appendices

Climate Action Measure Selection Process

Potential Measure

Measure Selection

Climate Action Measure Selection Process

Potential Measure

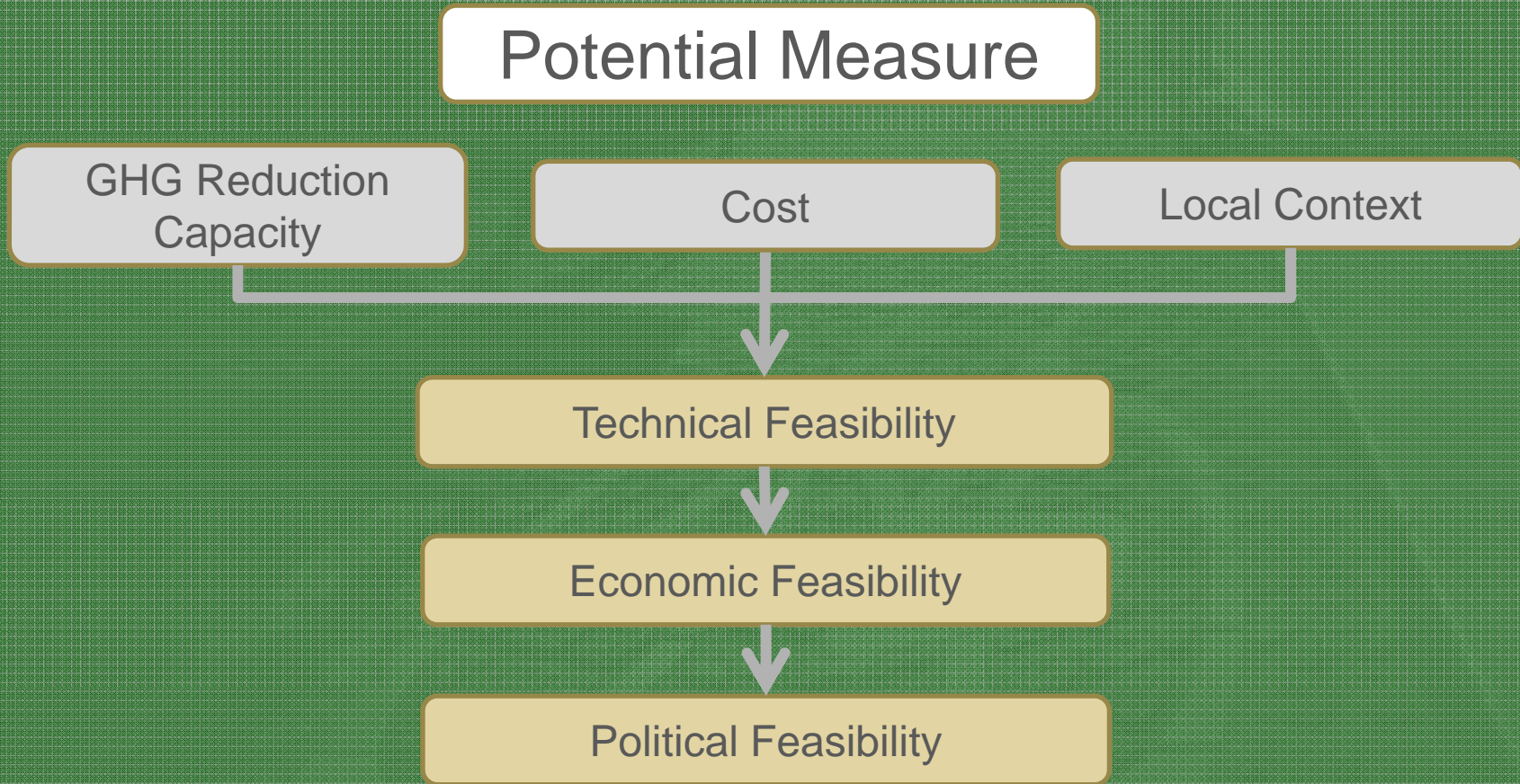
GHG Reduction
Capacity

Cost

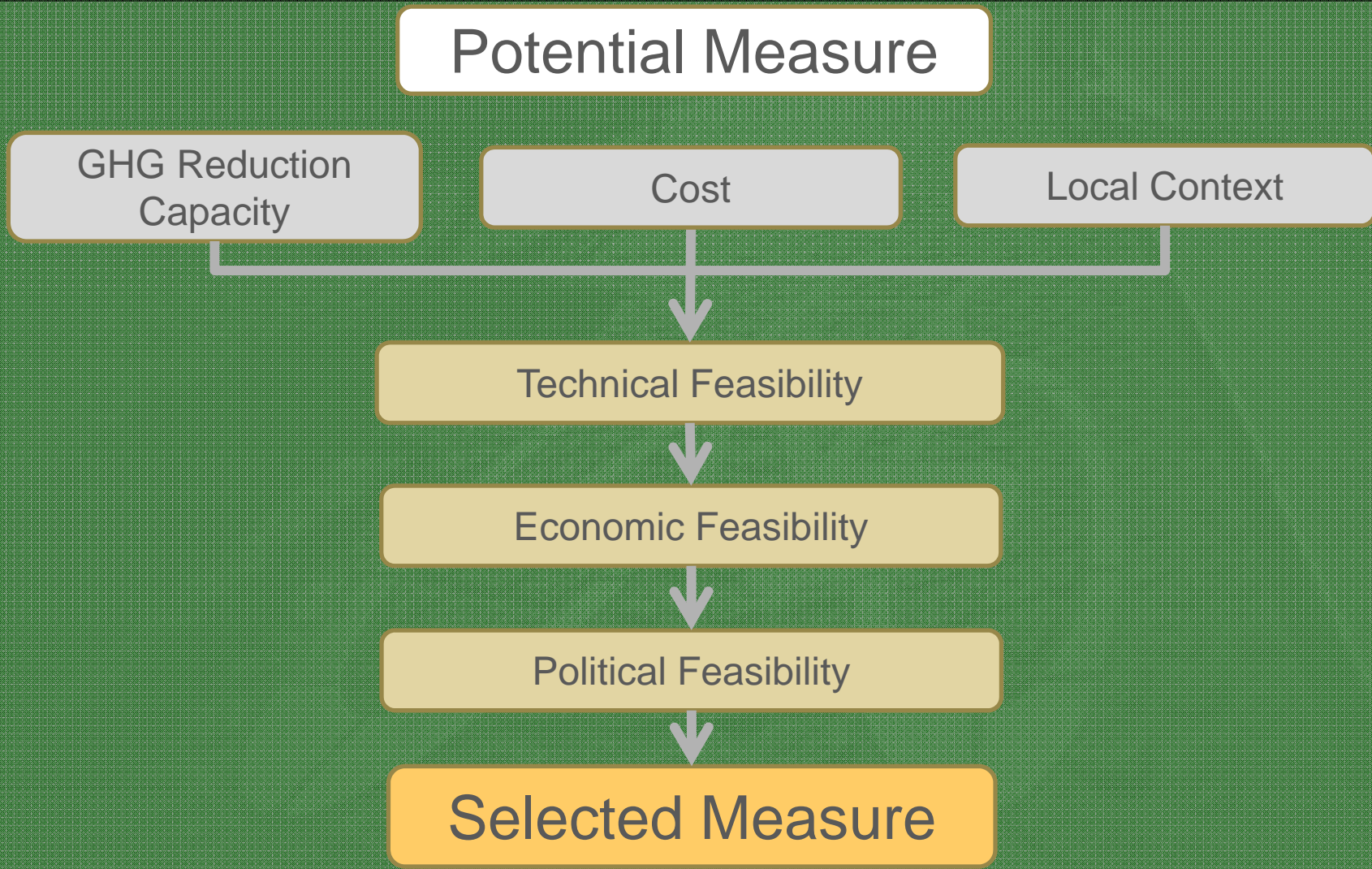
Local Context

Measure Selection

Climate Action Measure Selection Process



Climate Action Measure Selection Process



Climate Action Measures



Land Use – 5 measures (3)



Transportation – 15 measures (5)



Buildings and Energy – 17 measures (5)



Waste – 4 measures (1)

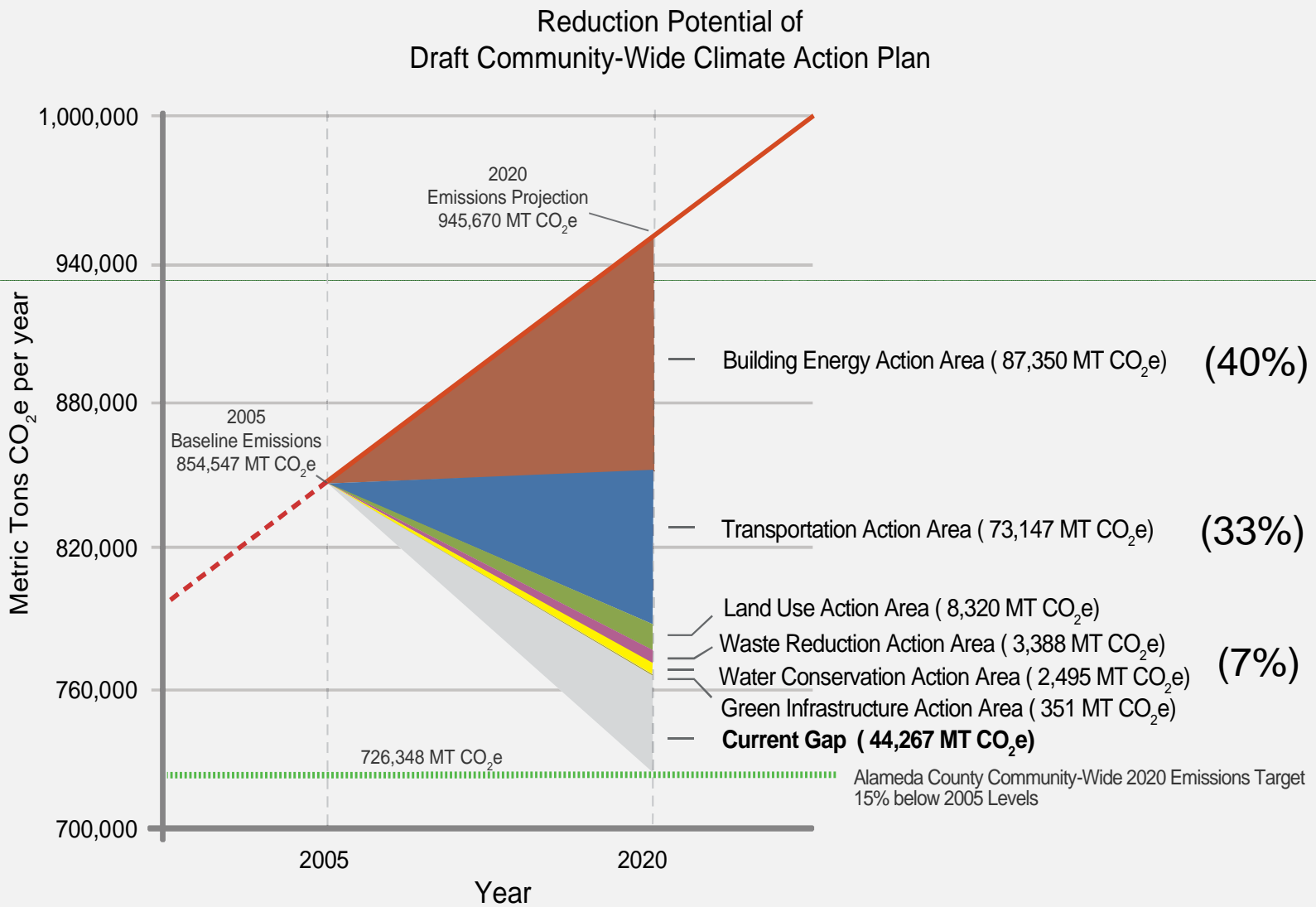


Water – 4 measures (0)



Green Infrastructure – 2 measures (1)

Reduction Potential of Proposed Measures



Part II: CAP measures – info included

L1: Title of measure

- GHG reduction potential: xxxx MT CO₂
- Cost to county: low \$50,000/ medium \$250,000/ high \$ +
- Cost to resident/building owner:
 - None / Low \$50 / Medium \$250 / High +
- Savings to resident/building owner:
 - None / Low \$50 / Medium \$250 / High +
- Description of measure

Part II: CAP measures – info included

- Implementation Action – e.g. conduct study of xx
- Timeframe – short 1-2 years / medium 2-5 years / long 5-10 years
- Responsibility – County department
- Progress indicators - e.g. miles of bike lane
- Targets e.g. x miles by 2015
- Potential funding options



Building Energy - 4.1:

Develop a comprehensive renewable energy program that encourages residential property owners to install solar energy systems.

Measure Description:

The County will develop an outreach program that encourages residential owners to install solar photovoltaic and solar hot water systems. The program will aim to maximize participation of the community in renewable energy generation. As described in measure Building Energy 2.2, the County will partner with adjacent cities and ABAG to create an effective renewable energy and energy efficiency financing program. Renewable and Solar Technology program and will allow residential and commercial property owners to repay the cost of solar energy systems through a voluntary tax increment on their property tax bill. The County will pay the installation cost of a renewable energy system for approved applicants. In turn, the County will add a line item to the owners' property tax bill sufficient to repay the cost of the energy project plus interest over 20 years. If the property is sold, both the renewable energy system and the remaining debt stay with the property. Property owners will also be able to finance the renewable systems by using this program in conjunction with the California Solar Initiative rebate program. Through AB 811, a City or County can adopt a voluntary community benefit district for this purpose. Stopwaste and ABAG are currently exploring the viability of setting up a program. Obtaining low-cost bond financing is critical. Current bond interest rates assume 7 percent. Under a 7 percent interest rate, property owners with excellent credit have access to lower-cost financing through traditional banks. The specific logistics of the program have yet to be determined, but its participation will be highly dependent on the availability of low-cost financing.

GHG Reduction Potential:
2,100
MTCO₂e

Community Co-Benefits:


Cost to County:
Low

Private Cost:
Yes

Potential Funding Sources:
City General Fund;
AB 811;
Utilities rebates

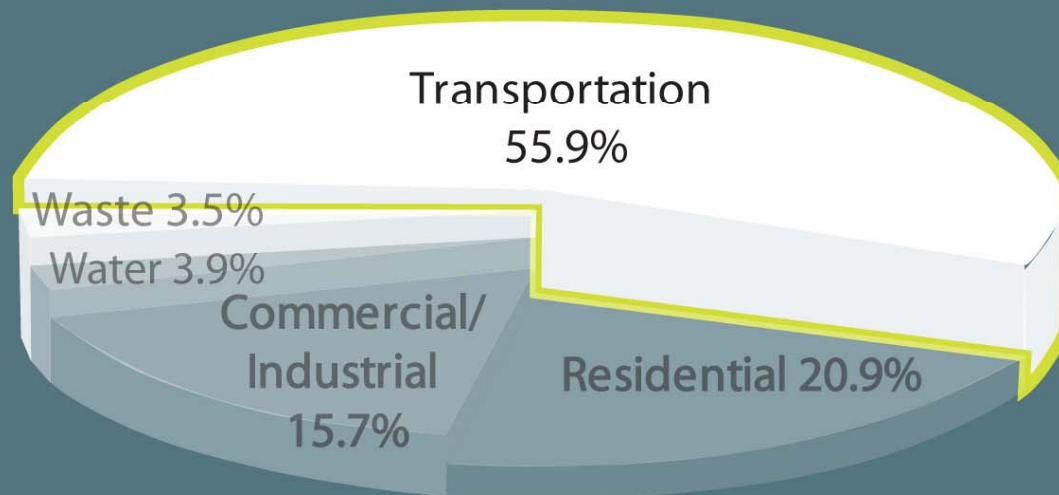
Implementation Action		Timetables	Responsibility
A	Amend the Green Building Ordinance to incorporate the Tier 2 energy efficiency standards contained in Section 503.1.2 of the 2008 California Green Building Code as the required standards for energy efficiency for new construction.	Short Term (1-2 years)	County Supervisors; Building Department; Finance Department
Progress Indicators		Targets	
I	Percentage of residential buildings that have installed photovoltaic or solar hot water heaters	10% by 2015 20% by 2020	

Climate Action Measures






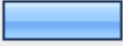
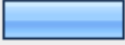




Transportation


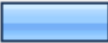



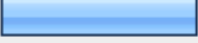

Alameda County
Greenhouse Gas Emissions Inventory
Transportation Sector = 55.9%









6. What is your usual method of transportation to/from work? (Select all that apply.)

		Response Percent	Response Count
Car (by self)		59.9%	193
Carpool/Shared Ride		8.7%	28
Bicycle		6.8%	22
BART		23.6%	76
Bus		6.5%	21
Work from home		12.7%	41
Walk		13.4%	43
Ferry		0.3%	1
Not Applicable		16.5%	53
		<i>answered question</i>	322
		<i>skipped question</i>	7


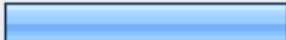
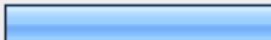


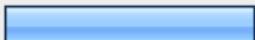


7. What is your usual method of transportation to/from local shops and services? (Select all that apply.)

		Response Percent	Response Count
Car (by self)		84.1%	270
Carpool/Shared Ride		11.5%	37
Bicycle		7.5%	24
BART		9.7%	31
Bus		4.4%	14
Walk		21.5%	69
Not Applicable		0.6%	2
		answered question	321
		skipped question	8


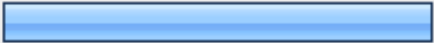
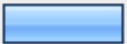
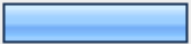

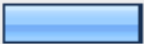
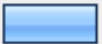
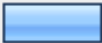
9. Other than for commuting to work, how often do you ride public transportation? (Select one.)

		Response Percent	Response Count
Never		15.4%	49
A few times a year		51.1%	163
Once a month		17.6%	56
Weekly		8.5%	27
A few times a week		6.3%	20
Daily		1.3%	4
		<i>answered question</i>	319
		<i>skipped question</i>	10

10. What would cause you to use more public transportation? (Select all that apply.)

		Response Percent	Response Count
Cleaner, Safer System		18.6%	55
Closer to home/work		31.9%	94
More service		30.2%	89
More information		4.7%	14
Free shuttle to BART, Bus		33.9%	100
Reduced rates or fares		28.1%	83
If it was as fast as driving		32.5%	96
Other		15.6%	46
		<i>answered question</i>	295
		<i>skipped question</i>	34

15. What would encourage you to ride a bicycle more often? (Select all that apply.)

		Response Percent	Response Count
Safer bike lines		67.4%	122
More bike lanes		48.1%	87
Bike-Share/Bike Rental Options		12.7%	23
More secure locks		20.4%	37
More BART bike storage		21.5%	39
More BART bike hours		14.9%	27
Route Information		9.9%	18
Free Safety Classes		10.5%	19
		answered question	181
		skipped question	148

Climate Action Measures



Transportation

Objectives:

- Improve Walking and Biking Conditions
- Make Public Transit More User Friendly
- Promote Pedestrian- and Transit-oriented development

Climate Action Measures



T - 1 Improve bicycle infrastructure near community activity areas.

- GHG REDUCTION POTENTIAL: 7,650 MT CO₂e
- COST TO COUNTY: HIGH
- COST TO RESIDENT or BUILDING OWNER: NONE
- SAVINGS TO RESIDENT or BUILDING OWNER: NONE



Example measures

Climate Action Measures



T - 1 Improve bicycle infrastructure near community activity areas.

Implementation Action	Timeframe	Responsibility
A Amend existing Bicycle Master Plan to prioritize bicycle infrastructure improvements that increase resident access to community activity centers.	Short Term (1-2 years)	Transportation; Public Works
B Implement bicycle infrastructure improvements serving schools and transit stations.	Medium Term (2-5 years)	
C Implement bicycle infrastructure improvements serving employment centers, neighborhood commercial centers, and downtown business districts.	Long Term (5-10 years)	
Progress Indicators	Targets	
i Miles of additional bicycle network.	XX by 2015; XX by 2020	

Example measures

Climate Action Measures



T – 15 Develop commercial area parking fee.

- GHG REDUCTION POTENTIAL: 12,660 MT CO₂e
- COST TO COUNTY: MEDIUM
- COST TO RESIDENT or BUILDING OWNER: MEDIUM
- SAVINGS TO RESIDENT or BUILDING OWNER: NONE

Climate Action Measures



T – 15 Develop commercial area parking fee.

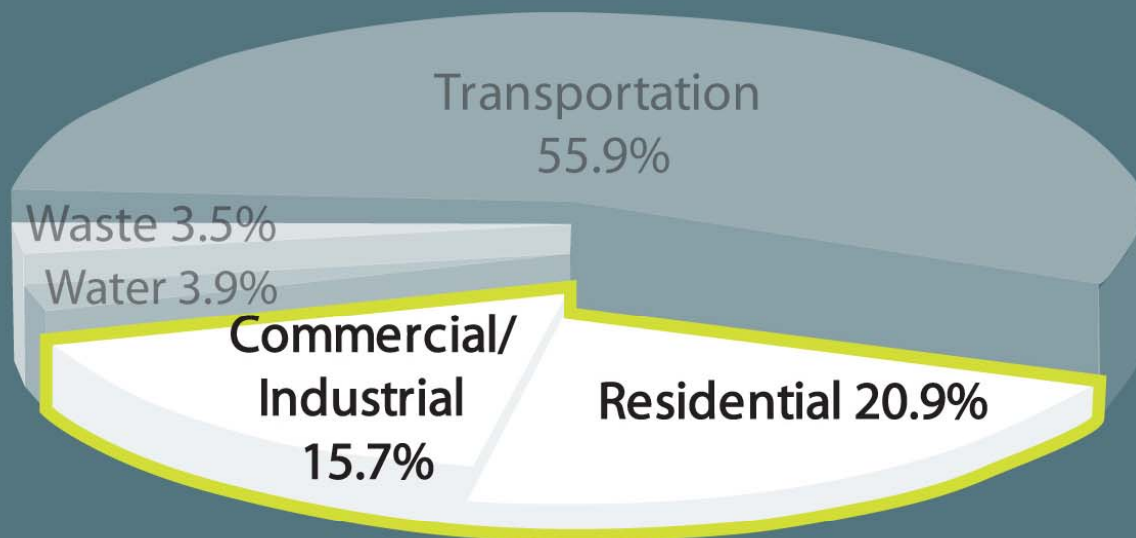
Implementation Action	Timeframe	Responsibility
A Set up commercial parking fee task force to guide fee development and implementation.	Short Term (1-2 years)	County Supervisors; Planning
B Adopt an ordinance that establishes a per hour fee for public parking in commercial districts. Establish a residential parking permit system for adjacent areas.	Medium Term (2-5 years)	County Supervisors; Planning
C Work with Alameda County cities, and other East Bay jurisdictions, to develop a regional commercial district parking fee.	Short Term (1-2 years)	County Supervisors; Planning
Progress Indicators	Targets	
i NA	NA	

Climate Action Strategies

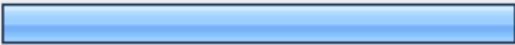

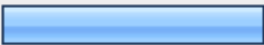


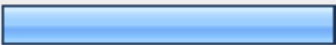


Buildings and Energy


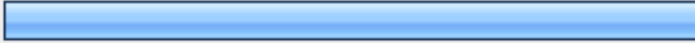

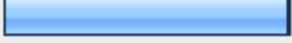

Alameda County
Greenhouse Gas Emissions Inventory
Building Energy Sector = 36.6%



18. Please indicate if you would be willing to do any of the following in your home. (Select all that apply.)

		Response Percent	Response Count
No-Cost Audit to Identify Ways to Improve Home Energy Efficiency		58.3%	133
Use Energy Efficient Light bulbs- (~\$5 a light bulb)		43.4%	99
Replace Refrigerator with Energy Efficient Model-(~\$900)		29.4%	67
Insulate Home-(~\$4,000)		17.1%	39
Install Solar Water Heater-(~\$5,000)		36.4%	83
Install Rooftop Solar Panels (~\$18,000)		37.7%	86
		<i>answered question</i>	228
		<i>skipped question</i>	101

19. What would encourage you to install any of the technologies mentioned in Question 18? (Select all that apply.)

		Response Percent	Response Count
More Information on the Energy/Financial Savings		31.0%	77
Grants or Incentive Programs to Offset Costs		79.4%	197
Low Interest Loans		32.7%	81
List of Reliable Contractors or Installers		32.3%	80
Lower Utility Bills		58.9%	146
		<i>answered question</i>	248
		<i>skipped question</i>	81

Climate Action Strategies



Buildings and Energy

Objectives:

- Retrofit Existing Residential Buildings
- Retrofit Existing Commercial Buildings
- Energy Performance in New Construction
- Maximize Use of Renewable Energy
- Community Energy Management

Climate Action Measures



E - 1 Evaluate the potential for community choice aggregation in unincorporated Alameda County.

- GHG REDUCTION POTENTIAL: TBD MT CO₂e
- COST TO COUNTY: LOW
- COST TO RESIDENT or BUILDING OWNER: NONE
- SAVINGS TO RESIDENT or BUILDING OWNER: MEDIUM

Climate Action Measures



E - 1 Evaluate the potential for community choice aggregation in unincorporated Alameda County.

Implementation Action		Timeframe	Responsibility
A	Conduct a thorough feasibility study to determine whether a community choice aggregation program is appropriate for unincorporated Alameda County.	Short Term (1-2 years)	Finance; Community Development; Public Works
Progress Indicators		Targets	
i	NA	NA	



Example measures

Climate Action Measures



E – 4 Develop comprehensive outreach program to facilitate voluntary home energy efficiency improvements.

- GHG REDUCTION POTENTIAL: SUPPORTING
- COST TO COUNTY: LOW
- COST TO RESIDENT or BUILDING OWNER: NONE
- SAVINGS TO RESIDENT or BUILDING OWNER: NONE (indirect)

Climate Action Measures



E – 4 Develop comprehensive outreach program to facilitate voluntary home energy efficiency improvements.

Implementation Action	Timeframe	Responsibility
A Work with PG&E and other community organizations to develop energy efficiency outreach programs for residents and multifamily property owners.	Short Term (1-2 years)	Community Development
B Develop and maintain a website describing energy efficiency rebates, incentives, and case studies.	Short Term (1-2 years)	Community Development
Progress Indicators	Targets	
i Number of households serviced by community energy efficiency organizations.	1,250 by 2015 2,500 by 2020	
ii Participation in energy efficiency rebate programs (currently around 5% of all accounts),	10% by 2015	

Climate Action Measures



E – 11 Require all new construction to achieve California Green Building Code Tier II Energy Efficiency Standards

- GHG REDUCTION POTENTIAL: 10,185 MT CO₂e
- COST TO COUNTY: MEDIUM
- COST TO RESIDENT or BUILDING OWNER: HIGH
- SAVINGS TO RESIDENT or BUILDING OWNER: HIGH

Climate Action Measures



E – 11 Require all new construction to achieve California Green Building Code Tier II Energy Efficiency Standards

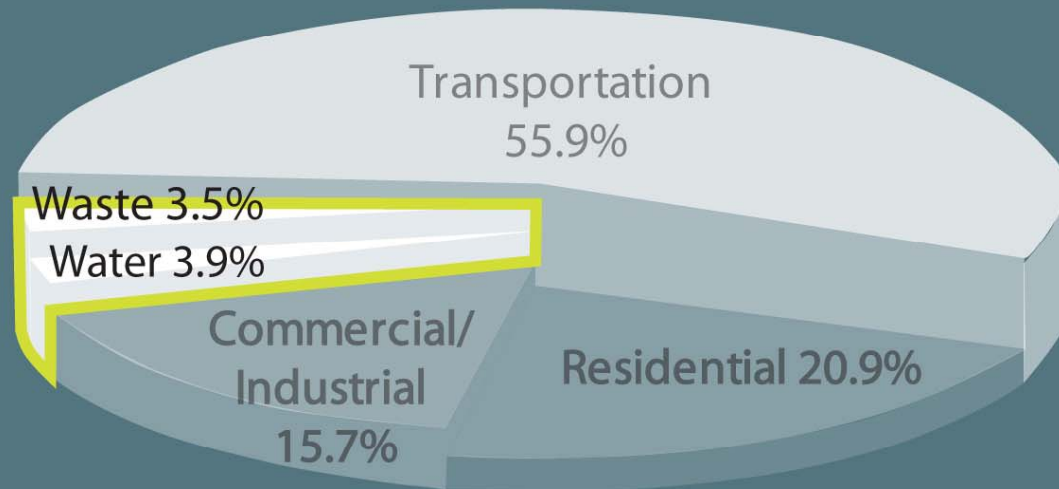
Implementation Action	Timeframe	Responsibility
<p>A Amend the County’s Green Building Ordinance to incorporate the Tier II energy efficiency standards contained in Section 503.1.2 of the 2008 California Green Building Code as the required standards for energy efficiency for new construction.</p>	<p>Short Term (1-2 years)</p>	<p>County Supervisors; Building</p>
Progress Indicators	Targets	
<p>i NA</p>	<p>NA</p>	

Climate Action Measures



Land Use, Waste, Water, and Green Infrastructure

Alameda County
Greenhouse Gas Emissions Inventory
Water and Waste Sector = 7.4%



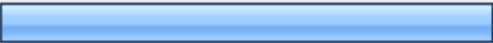

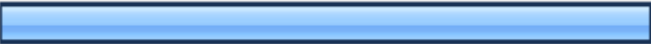


Survey results

8. How long would it take to safely walk to purchase most daily goods and services? (Select one.)

		Response Percent	Response Count
Less than 5 minutes		2.9%	9
5-10 minutes		6.3%	20
10-15 minutes		14.9%	47
15 minutes or more		62.9%	198
Not safe		13.0%	41
		<i>answered question</i>	315
		<i>skipped question</i>	14

Survey results

20. Please indicate if you use/have completed any of these water efficiency activities. (Select all that apply.)

		Response Percent	Response Count
Use Water Efficient Dish Washing Machine		55.6%	144
Use Water Efficient Clothes Washer		55.2%	143
Use Low Flow Fixtures (Faucets, Toilets, Showers)		74.1%	192
Use Rainwater Collection Barrels		7.7%	20
Have a Xeriscaped Garden (low to no irrigation)		23.6%	61
		<i>answered question</i>	259
		<i>skipped question</i>	70

Climate Action Measures



Land Use, Waste, Water, and Green Infrastructure

Objectives:

- Vibrant, mixed use, higher density commercial centers
- Zero Waste
- Conserve Water Resources
- Enhance Green Infrastructure

Climate Action Measures



L - 1 Facilitate the transformation of the Castro Valley Central Business District into a higher density, mixed-used, pedestrian- and transit-oriented community.

- GHG REDUCTION POTENTIAL: TBD CO₂e
- COST TO COUNTY: HIGH
- COST TO RESIDENT or BUILDING OWNER: NONE
- SAVINGS TO RESIDENT or BUILDING OWNER: NONE

Climate Action Measures

Implementation Action	Timeframe	Responsibility
A Revise Castro Valley Central Business District Specific Plan to provide vision for pedestrian-friendly, transit-oriented development.	Short Term (1-2 years)	County Supervisors; Planning
B Conduct audit of existing zoning, development standards, etc for compatibility for transit-oriented development.	Short Term (1-2 years)	Planning
C Create full-time liaison position to facilitate implementation of revised CBD Specific Plan.	Short Term (1-2 years)	Planning
D Develop CBD land assembly program.	Short Term (1-2 years)	Planning
E Create CBD infrastructure investment program that identifies and implements basic infrastructure improvements needed to attract TOD developers.	Short Term (1-2 years)	Planning; Public Works
Progress Indicators	Targets	
i Number of new TOD residential dwelling units.	200 units by 2015; 800 units by 2020	
ii Mix of uses within ½-mile of BART station in 2020.	50% commercial & 50% residential	

Climate Action Measures



WS – 1 Increase solid waste reduction and diversion to 90% by 2030.

- GHG REDUCTION POTENTIAL: 2,495 MT CO₂e
- COST TO COUNTY: MEDIUM
- COST TO RESIDENT or BUILDING OWNER: NONE
- SAVINGS TO RESIDENT or BUILDING OWNER: NONE

Climate Action Measures

Implementation Action		Timeframe	Responsibility
A	Adopt a resolution to achieve 90% waste reduction and diversion by 2030.	Short Term (1-2 years)	County Supervisors; Community Development
B	Expand outreach programs to maximize participation in waste reduction and diversion programs.	Short Term (1-2 years)	Community Development
Progress Indicators		Targets	
i	Community waste diversion rate	75% by 2010 80% by 2020 90% by 2030	

Climate Action Measures



G -1 Expand urban forest (e.g. street trees, and trees on private lots) in order to sequester carbon and reduce building energy consumption.

- GHG REDUCTION POTENTIAL: 285 MT CO₂e
- COST TO COUNTY: HIGH
- COST TO RESIDENT or BUILDING OWNER: NONE
- SAVINGS TO RESIDENT or BUILDING OWNER: NONE

Climate Action Measures

Implementation Action		Timeframe	Responsibility
A	Develop an Urban Forest Management Plan.	Short Term (1-2 years)	Public Works; Planning
B	Develop outreach program to educate residents and businesses about urban forest benefits and encourage the planting of additional trees on private property.	Short Term (1-2 years)	Public Works; Planning
Progress Indicators		Targets	
i	Number of trees planted per year on public land and right-of-ways in urban areas.	1,000 trees	
ii	Total number of trees planted 2010-2020 on public land and right-of-ways in urban areas.	10,000 trees	
iii	Total number of trees planted 2010-2020 on private property.	1,000 trees	

More Information:

- County Climate Action Website:

http://www.acgov.org/cda/planning/climate_action_plan.htm

- Join our Mailing List:

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- Contact us at:

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Questions and Discussion

