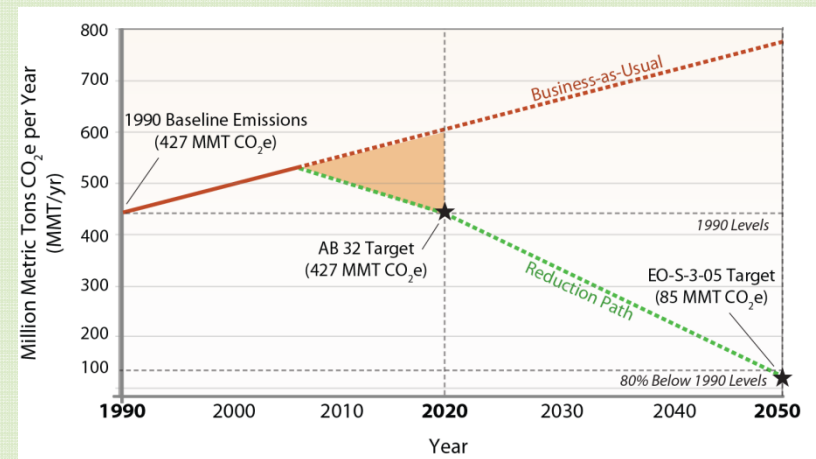


California's plan to combat GHG emissions

- Executive Order S-3-05 (2005)
- Global Warming Solutions Act (AB 32, 2006)
 - Reduce GHGs to:
 - 1990 levels by 2020
 - 80% below 1990 levels by 2050
- Local governments
 - State recommends 15% below current levels by 2020
 - Attorney General recommendations



General Plan Update and the CAP

- General Plan Update
 - Establishes GHG reduction targets
 - Defines GHG reduction strategies
- Climate Action Plan
 - Near-term action plan to 2020
 - Implements General Plan strategies
 - Estimates GHG reductions
 - Includes likely costs
 - Identifies funding options



West Hollywood's Climate Action Plan

- Purpose
 - Describe innovative steps for City departments and agencies to reduce GHG emissions
 - Identify steps that will reduce emissions within the community (businesses & residents)
 - Propose strategies and actions designed to achieve target GHG reduction goal
 - Create a framework for monitoring progress towards goals



GHG Reduction Potential:
8,000 MT CO₂e



Cost to County:
Medium

Cost to Resident or Building Owner:
None

Savings to Resident or Building Owner:
Medium

Potential Funding Sources:
Partnerships w/ Organizations;
General Fund

E-1: Community Energy

Work with PG&E and Alameda County cities to accelerate "Smart Grid" integration in the community.

Measure Description:

The existing electricity delivery system in Alameda County relies on 100-year old technology. Electricity flows over the grid from far-away power plants to consumers, and reliability is ensured by maintaining excess capacity. The result is an inefficient and environmentally wasteful system that emits large amounts of GHGs, relies heavily on fossil fuel power plants, and is not well-suited to accommodate distributed solar or wind energy sources. The smart grid, an emerging energy management system, which combines information technology with renewable energy to significantly improve how electricity is generated, delivered, and consumed. The smart grid will reduce energy demand, improve integration of distributed energy production, and increase the efficiency of electricity transmission and distribution. These changes will help residents and business save energy, and can reduce GHG emissions associated with energy production.

The County will work with PG&E and other neighboring cities to encourage full implementation of smart grid technologies. PG&E is already planning to install smart meters, a key component of the larger smart grid, in all homes and businesses in the Bay Area by 2010. The real value of the smart grid does not however end at the meter; its full value is only realized once it extends into people's homes and businesses. The County and partners will promote the use of smart appliances in homes and businesses through outreach and incentivization programs. The County will also require smart grid compatible major appliances (e.g., heating, ventilation, air conditioning) in new construction when technologies are available.

While full integration of the smart grid will take time to realize, energy analysts estimate that it will ultimately be capable of reducing electricity-related GHG emissions by between four and 30% below current levels (CISCO 2008). When estimating the potential GHG emission reductions associated with implementation of the smart grid, the County included the energy efficiency improvements gained from integrating smart grid energy management systems used to control lighting, heating, ventilation, and air conditioning and other major appliances in residential and commercial buildings. Implementation of these systems is expected to reduce residential building energy consumption by 6% and commercial building energy consumption by 8% (Pacific Northwest National Laboratory, 2004).

	Implementation Action	Timetables	Responsibility
A	Partner with PG&E and develop a community smart grid integration plan.	Short Term (1-2 years)	Planning
B	Develop outreach program that informs property owners and businesses about benefits of smart grid and smart appliances.	Medium Term (2-5 years)	Planning
C	Adopt ordinance that requires smart grid energy management system and compatible heating, ventilation, air conditioning and lighting in new construction.	Medium Term (2-5 years)	County Supervisors; Planning
Progress Indicators		Targets	
i	Percent of buildings with Smart Meters.	100% by 2015	
ii	Percent of communitywide energy savings from Smart Grid Integration.	4% by 2020	

West Hollywood's Climate Action Plan

- West Hollywood is mostly built out
 - But is changing with commercial reinvestment along key corridors
- Climate change strategies could include:
 - Reducing paved expanses/heat islands
 - Increasing street trees
 - Energy- and water-efficient home and business improvements and financing
 - Green building incentives
 - Residential solar panel financing
 - Reinventing roads as complete streets accessible to all users



Measure Categories



Community Leadership and Engagement



Land Use and Community Design



Transportation and Mobility



Energy Use and Efficiency



Water Use and Efficiency



Waste Reduction and Recycling



Green Space and Open Space



Examples

Community Leadership and Engagement



1. Achieve Green Building certification for all new public buildings
2. Conduct regular public workshops to increase community participation and awareness in City sustainability efforts



Examples

Land Use and Community Design



1. Focus mixed-use redevelopment in transit corridors
2. Retrofit the public realm with pedestrian-friendly infrastructure such as seating areas and shade trees and wider sidewalks



Examples

Transportation and Mobility



1. Designate streets as bicycle priority streets
2. Remove minimum parking standards and explore shared parking strategies



Examples

Energy Use and Efficiency



1. Incentivize solar power (grants/permit fee waivers)
2. Partner with utility companies to provide opportunities for using renewable energy sources



Examples

Water Use and Efficiency



1. Develop a native plants list and encourage residents and businesses to use species on the list for landscaping
2. When feasible, incorporate bio-swales and other best management practices within public rights-of-way



Examples

Waste Reduction and Recycling



1. Provide increased composting/food waste collection
2. Increase recycling efforts in multi-family housing



Examples

Green Space and Open Space



1. Expand the community tree canopy
2. Promote roof gardens, green roofs, and community gardens



Next Steps

- **Draft General Plan / Environmental Impact Report / Climate Action Plan (GHG Reduction Plan)**
 - **Summer 2010**



Questions and Discussion:

- **Climate Action Plan**
- **Your ideas to reduce GHG emissions**



Climate Change

Emissions Reductions...
Community Benefits



How West Hollywood Will Benefit

Greenhouse Gas Reduction Strategies Reduce Emissions and Create Numerous Other Benefits:

- Lower Energy Costs · Cleaner Air · Walkable Communities · Improved Public Health
- Less Traffic · Shorter Commute Times · More Competitive Businesses
- Improved Aesthetics · A Sustainable Healthy Planet

Best Practices

Land Use



- ▶ Focus Development in Transit Corridors
- ▶ Mixed Residential and Commercial Uses
- ▶ Walkable Full-Service Neighborhoods

Water



- ▶ Water-Efficient Technologies
- ▶ 'Purple Pipe' Water Recycling
- ▶ Landscape Water Conservation

Renewable Energy



- ▶ Solar Photovoltaic
- ▶ Solar Hot Water Heating
- ▶ Green Power Purchases

Transportation



- ▶ Pedestrian/Bicycle Infrastructure
- ▶ Expanded Public Transit Systems
- ▶ Removal of Minimum Parking Standards

Recycling and Waste








- ▶ Zero-Waste Communities
- ▶ Food Waste and Organics Collection
- ▶ Alternative Fuel Waste Collection Vehicles

Building Energy



- ▶ Zero-Energy Buildings
- ▶ LEED Certification for all New Buildings
- ▶ Construction Waste Recycling Centers

Example Strategies

	Strategy	City	GHG Reduction Tonnes/Year	Annual Cost Savings	Other Benefits
	Residential Energy Efficiency Retrofits	Chicago, IL	12 (per home)	\$900 per home	Reduced energy bills for residents
	Upgrade 86% of Traffic Lights to LED Bulbs	San Diego, CA	7,437	\$1,300,000	Reduced operations and maintenance costs, improved service quality
	Urban Forestry – Cool Cities Program – 500 Trees	Newark, NJ	5.9	NA	2% reduction in cooling costs, improved aesthetics
	Bus Rapid Transit	Honolulu, HI	6,350	NA	Reduced congestion, lower commuting costs
	Green Power Purchasing	Montgomery, MD	19,050	NA	Energy price security

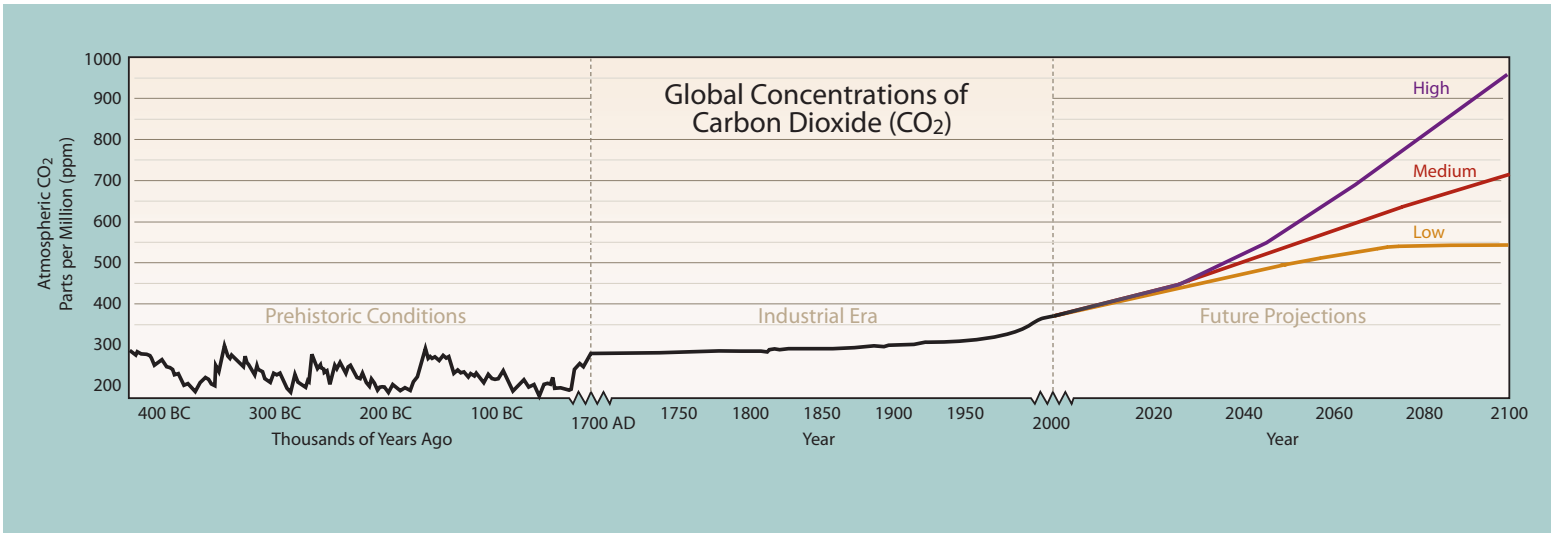
*NA = Data Not Available

Public Workshop
January 30, 2010



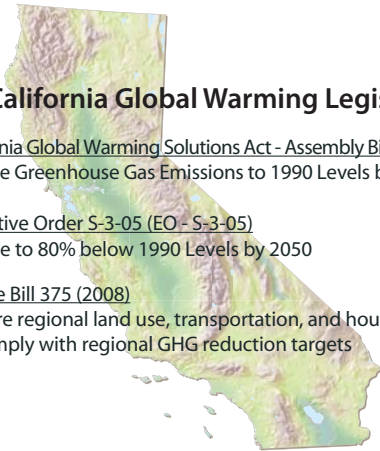
Climate Change

Global, State, and Local Context

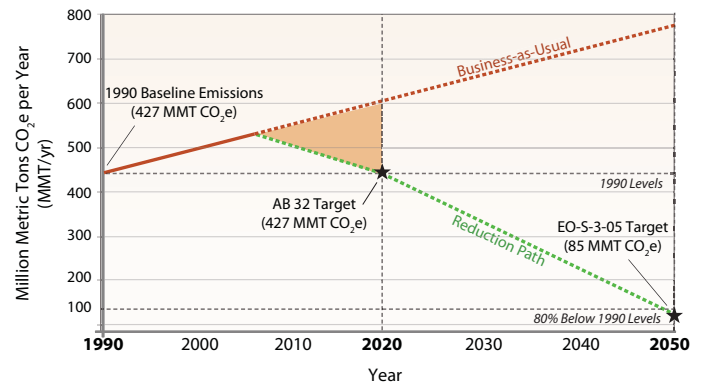


State of California Global Warming Legislation:

- ▶ [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



California's Greenhouse Gas Emissions 1990 to 2050



WEST HOLLYWOOD CONTEXT

Why it matters locally - climate disruption

If GHG emissions are not reduced globally, the effects of climate change on West Hollywood are likely to be:

- Worse air quality/more smoggy days
- Decreased snowpack and water supply
- Increased number of heat waves
- Up to 2.5 times more critical dry years
- Increased wildfires
- Spread of disease factors (e.g. mosquitos)
- Up to 30% higher energy use



Increase in number of smoggy days



Increase in wildfires

Source: Climate Change Adaptation Strategy, California Resources Agency, 2009

Public Workshop
January 30, 2010

West
Hollywood
General
Plan
Update