

CITY OF SUNNYVALE



Climate Action Plan Workshop and CAP Overview

July 14, 2010

CAP Workshop #1

“My Role on the Road” Survey

Most people drive alone, but prefer to bike or walk. People listed as priorities:

- Safe bike lanes
- Increased frequency of public transit stops
- More mixed-use development to promote alternative transportation
- Education for motorists regarding bicycle and pedestrian safety

CAP Workshop #1

Sustainable Sunnyvale

- Community involvement and engagement
- Alternative energy
- Multimodal transportation options
- Water conservation
- Improved land use planning

CAP Workshop #1

Challenges

- Lack of long term vision
- Funding
- Existing vs. future land use and infrastructure
- Politics and bureaucracy
- Education, awareness and communication
- Personal behaviors

CAP Workshop #1

Strategies

- Making changes at the policy level
- Collaboration between government and private entities
- Continued education and public outreach
- Monetary and non-monetary incentives for sustainable practices
- Utilize foundations and for-profit interests for initial capital (grants, partnerships, etc.)

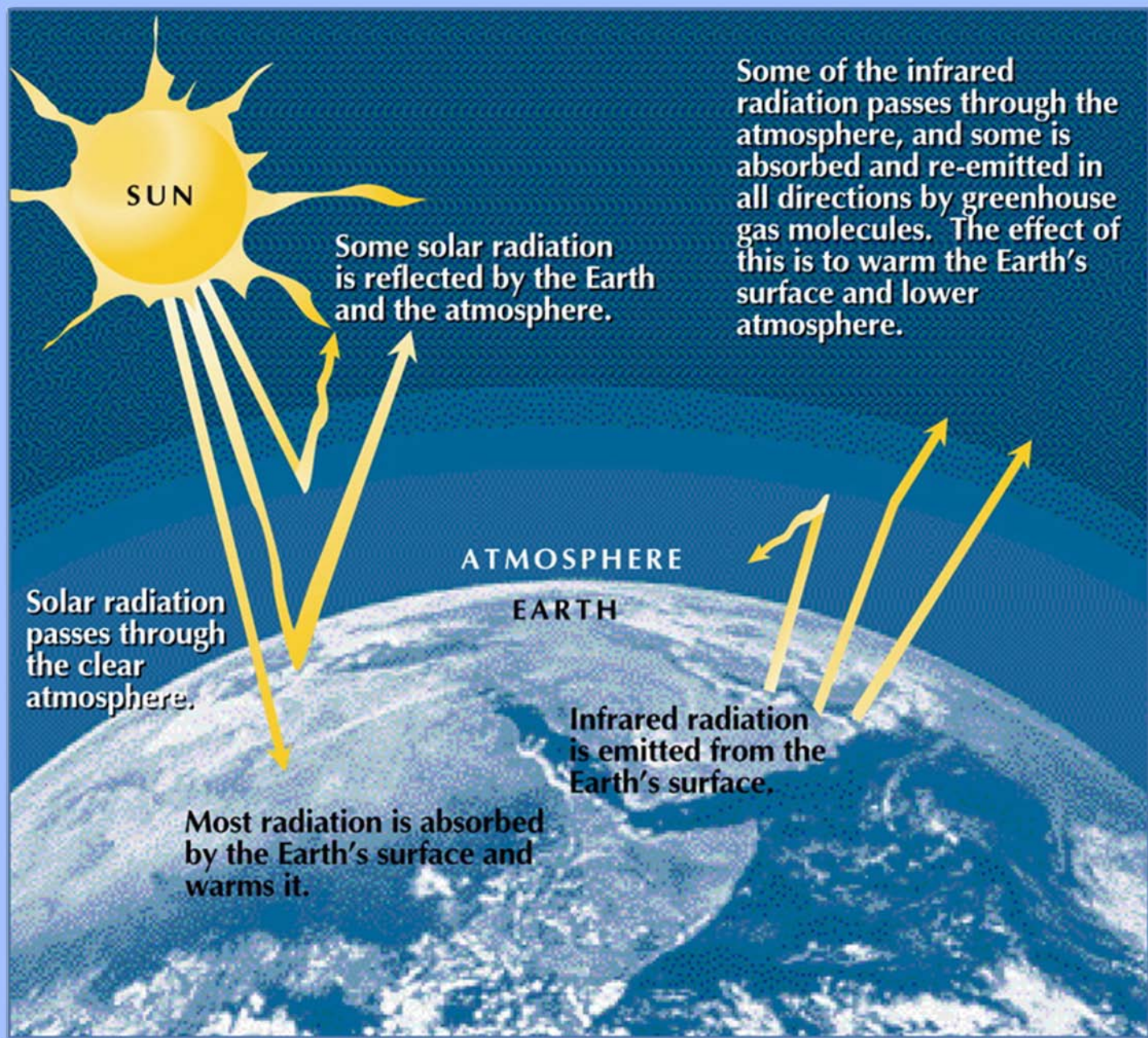
Your workshop experience?

What did you hear?

In the next 30 minutes:

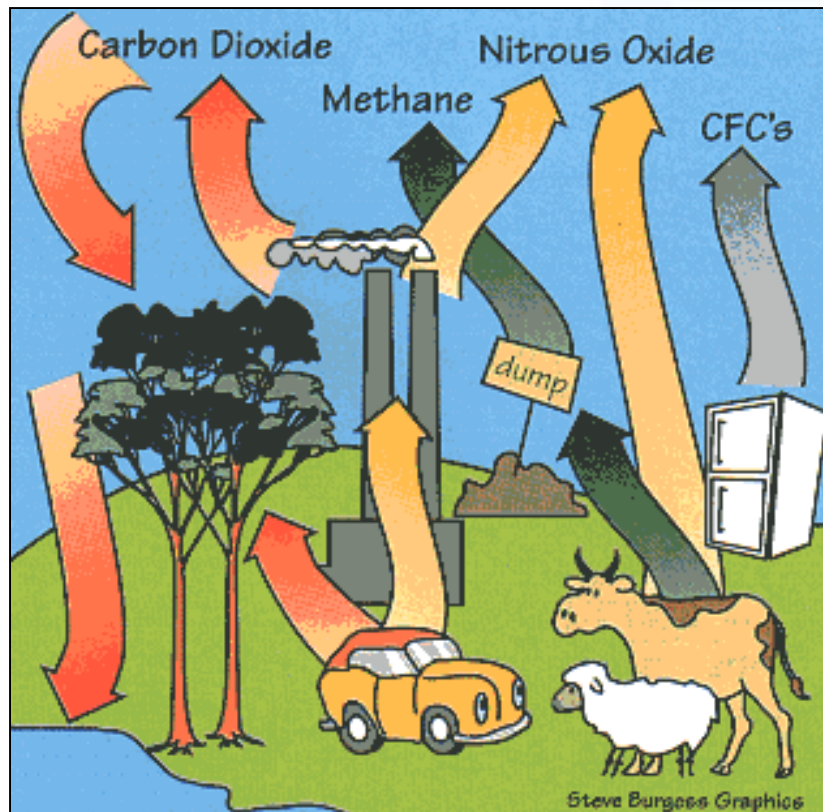


- Climate Change Overview
- Climate Action Plan Overview
- Target Setting
- GHG Reduction Measures
- Relationship of LUTE/CAP/EIR
- CEQA
- Questions/discussion



Source: U.S. EPA State and Local Climate Change Outreach Kit, March 2000

Greenhouse Gases



- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous Oxide (N_2O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFC)
- Sulfur hexafluoride (SF_6)



Definitions



- **Climate change** is a change in long-term weather patterns
- **Global warming** refers to an average increase in the Earth's surface temperature

What is a Climate Action Plan?

- A plan to reduce GHG emissions
- Quantify the impacts of policies to reduce GHGs
- Programmatic policy document linked to the General Plan
- Mitigates impacts of plans and projects within the City that are consistent with the CAP
- Provides for streamlined permitting for future projects consistent with the CAP

Why Create a CAP?

- Compliance with State of California mandates (AB 32, SB375 & SB 97)
- Eligibility for more funding
- Reduced time and cost for new development consistent with CAP
- Encourage implementation of City policies by quantifying benefits
- Adaptable and easily updated

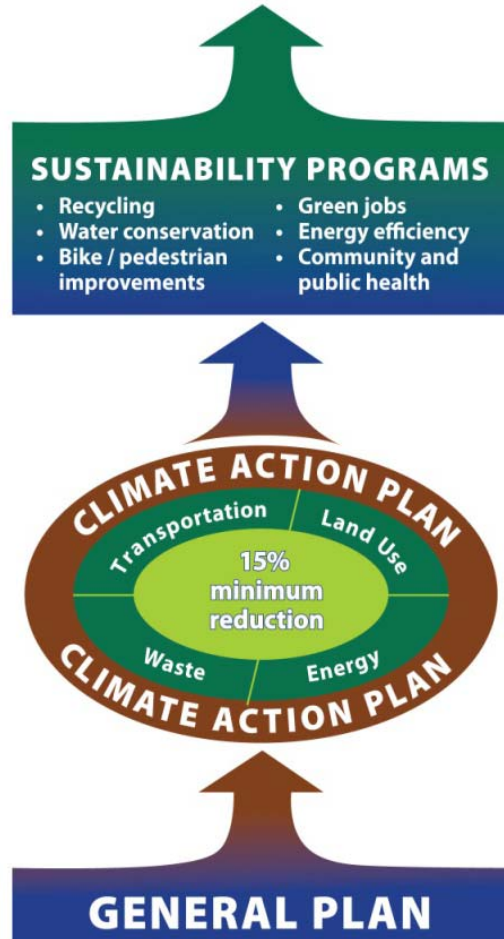
What's Included in a CAP?

- Overview of GHG emissions sources
- Set of GHG reduction targets
- Sector specific measures
 - Land Use & Transportation
 - Waste
 - Energy
 - Urban Forest/Sequestration
- Quantification of reduction measures
- Adaptation Measures
- Implementation Strategies



Relationship between LUTE/CAP/EIR

City and community together achieve
greenhouse gas reduction targets!



- CAP is separate policy document
- Related to and consistent with GP/LUTE
- Some City, regional and State programs in the CAP
- EIR will cover both LUTE and CAP
- Following a concurrent process

Community-wide GHG Emissions Inventory

Community-
Wide
Greenhouse
Gas
Inventory

Residential

Electricity
Natural Gas

**Commercial
Industrial**

Electricity
Natural Gas

Transportation

Highway VMT
Local road VMT

Waste

Landfilled Waste

Other

Urban Forest
Off-road
equipment

Target Setting

- Establish forecast years
 - 2005 Baseline
 - 2010 (current year)
 - 2020 (Consistency with BAAQMD CEQA Guidelines and AB32)
 - 2035 (Consistency with SB375,LUTE)
- Identify strategic policy focus
- Identify achievable target

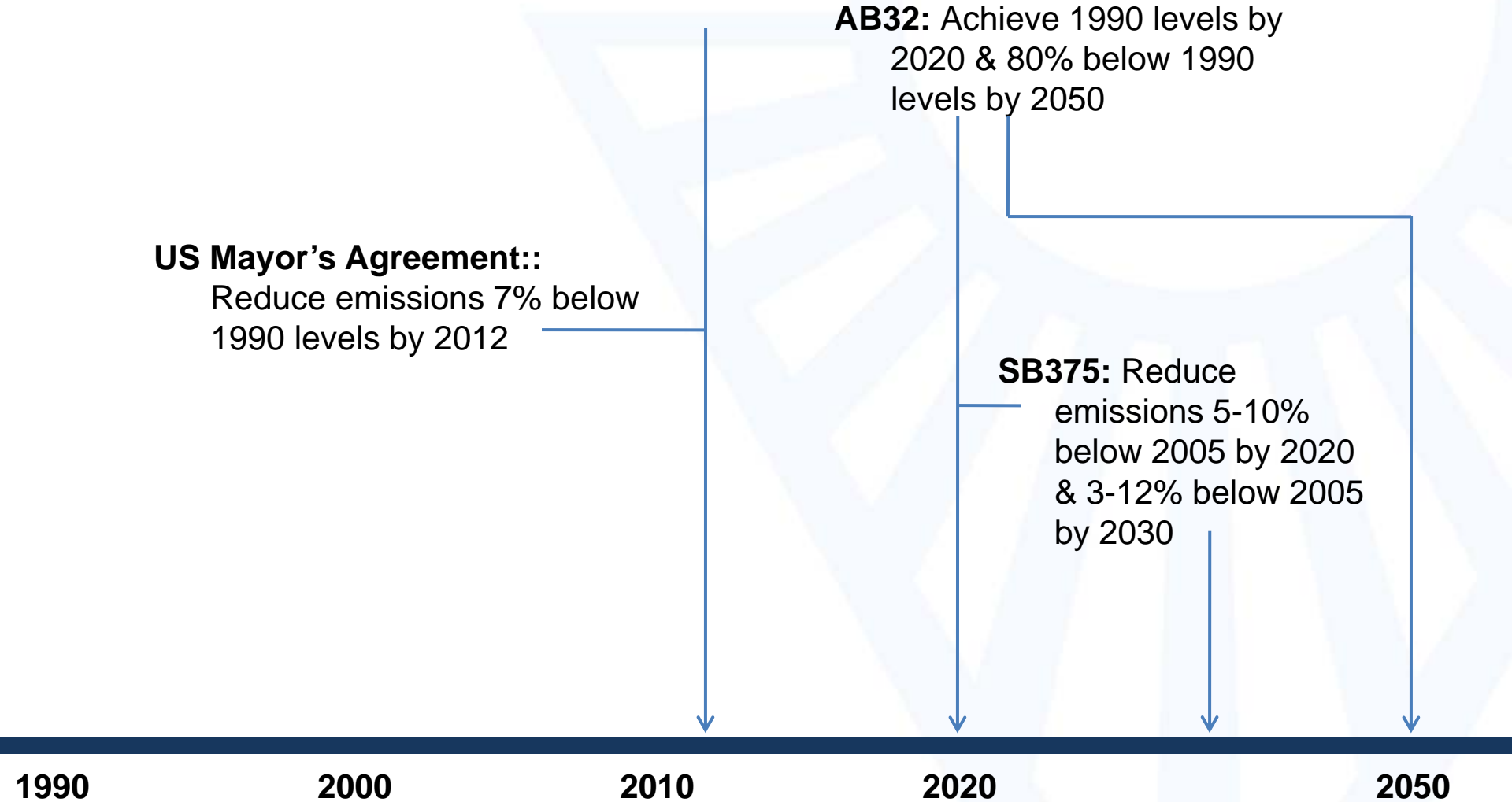
Summary of Reduction Targets

Kyoto Protocol: Achieve 1990 levels by 2012

AB32: Achieve 1990 levels by 2020 & 80% below 1990 levels by 2050

US Mayor's Agreement:
Reduce emissions 7% below 1990 levels by 2012

SB375: Reduce emissions 5-10% below 2005 by 2020 & 3-12% below 2005 by 2030



Summary of Reduction Targets

Seattle: Reduce emissions 7% below 1990 by 2012 & 30% below by 2024 & 80% below by 2050

Berkeley: Reduce emissions 33% below 2000 by 2020 & 80% below 2050

Sonoma County: Reduce emissions 20% below 1990 by 2010

BAAQMD CEQA Guidelines: Reduce emissions 15% below 2008 by 2020

1990

2000

2010

2020

2050

Emission Reduction Measures – Where are they from?

- Draw from existing local plans and activities (policy audit) and best practices
 - General Plan
 - CAPCOA, BAAQMD, AG, OPR
 - Regional planning activities
 - Existing programs and activities

The Life of a Reduction Measure

What's a reduction measure? A City's action to reduce GHG emissions from municipal operations and from the community.

STAGE

1

GOAL

What is the desired outcome by 2030?

EXAMPLES

- *increase tree canopy*
- *reduce urban heat island effect*
- *sequester carbon*

2

METHOD

How can the City and/or community make change happen?

- *create an ordinance*
- *provide an incentive*
- *pursue partnerships*
- *identify & fund new projects*

3

SPECIFIC ACTION

Where? Who?
When? How?

- *require tree replacements & plantings*
- *develop & implement Urban Forest Master Plan*
- *adopt shading requirements for parking lots and sidewalks*

REDUCTION MEASURE

What are the specific, quantifiable changes that will take place?

- *plant 1350 trees by 2030*
- *reduce ~356 metric tons of CO₂e annually*

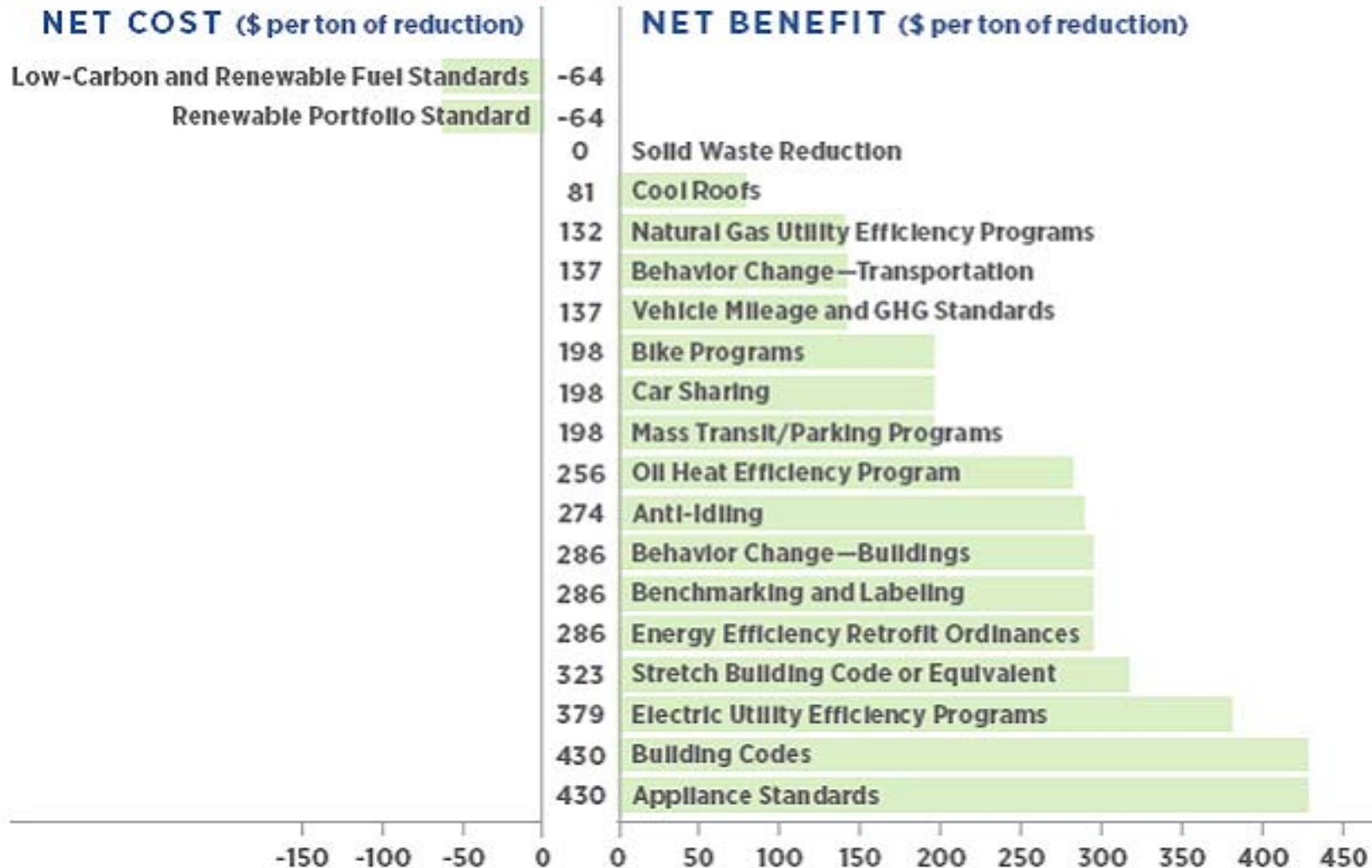
**Quantifiable
Reduction**

Quantification

- Measures are analyzed for :
 - Greenhouse gas reductions
 - Implementation cost and payback period
 - Co-benefits (ex: Improved aesthetics, decreased traffic, etc)
 - Political palatability
- Quantified in terms of GHGs (CO₂e) and other measures as appropriate
 - Electricity (kWh), Natural gas (therms), Waste (tons), Traffic (VMT), Vehicle Fuel (Gallons), Water (Gallons)

Quantification - Example

Net Savings from Greenhouse Gas Reduction Measures



Environmental Review



- BAAQMD Guidelines
- Attorney General's Guidance
- Tiering
 - General Plan Amendments
 - Project level review
- LUTE

Implementation and Monitoring

- Monitor and report on the progress quarterly, annually or every five years;
- Update the GHG inventory every five years;
- Continue and expand partnerships;
- Maintain funding for implementation;
- Integrate climate action planning with the General Plan and other County activities;
- Review and update the Plan regularly, at a minimum of every 5 years

Questions & Discussion

