

The background of the slide is a landscape photograph. It shows a dark, turbulent sky with heavy, grey clouds. A bright light source, likely the sun or moon, is positioned on the horizon, creating a strong lens flare and illuminating the scene from the left. Below the horizon is a dark, calm body of water. The overall color palette is dominated by dark blues, greys, and a bright white/yellow light source.

# Climate Action Team Public Meeting

September 13, 2005

# Climate Change

**“I say the debate is over. We know the science. We see the threat. And we know the time for action is now.”**

-- Governor Schwarzenegger  
June 1, 2005  
World Environment Day



# Executive Order Established Statewide GHG Targets

**By 2010, Reduce to 2000 Emission Levels\***

**By 2020, Reduce to 1990 Emission Levels\*\***

**By 2050, Reduce to 80% Below 1990 Levels**

\* Equals 59 Million Tons Emission Reductions, 11% Below BAU

\*\* Equals 145 Million Tons Emission Reductions, 25% Below BAU



# Other Directives in the EO

- CalEPA to Lead a Coordinated Effort
- Scenario Analysis to Evaluate Impacts on:
  - Public Health
  - Water Quality and Supply
  - Agriculture
  - Forests
  - Coastline
  - Will Include Adaptation Planning

# Climate Action Team

- CalEPA Secretary Chairs the Team
- ARB, BT&H, CDFA, CIWMB, CEC, PUC and Resources are Represented
- The CAT will:
  - Evaluate and Recommend Strategies to Meet Targets
  - Report on Scenario Analysis
  - Include Cap and Trade Options in the January Report
  - Report to Governor and Legislature in January and Bi-annually

# CAT Subgroups

- ❑ CAT Representatives and DOF, Scientists and Experts as Appropriate
- ❑ Cap and Trade Subgroup
  - Options for Climate Change Emission Cap-and-Trade Program
  - Pros and Cons
- ❑ Scenario Analysis Subgroup
  - Impacts on CA of Climate Change
  - Builds on CEC Climate Science Effort and PNAS Study

# Table 1 – Lead Agency and Strategy

<b>Air Resources Board</b>	<b>2010</b>	<b>2020</b>
Vehicle Climate Change Standards	1	30
Diesel Anti-idling	1	2
<b>Public Utilities Commission/Energy Commission</b>		
Accelerated Renewable Portfolio Std (33% by 2020)	5	11
Million Solar Roofs	0.4	3
Investor Owned Energy Efficiency Programs	4	8.8
<b>Integrated Waste Management Board</b>		
Achieve 50% Statewide Recycling Goal	3	3
<b>Energy Commission</b>		
Natural Gas Efficiency Improvements	1	6
Appliance Efficiency Standards	3	5
Fuel-efficient Replacement Tires & Inflation Programs	3	3
<b>Business Transportation and Housing</b>		
Reduced Venting and Leaks in Oil and Gas Systems	1	1
<b>State and Consumer Services/CalEPA</b>		
Green Buildings Initiative	0.5	1.8
<b>Air Resources Board/CalEPA</b>		
Hydrogen Vehicles	Not yet estimated	
<b>Total Potential Emission Reductions (million tons CO2 equivalent)</b>	<b>23</b>	<b>75</b>

# ARB Table 2 Strategies

## Air Resources Board

Other New Light Duty Vehicle Technology Improvements

HFC Reduction Strategies

Transport refrigeration units, Off-road electrification, Port electrification (ship to shore)

Manure Management

Semi Conductor Industry Targets (PFC Emissions)

Flared Natural Gas Measure

Biodiesel Blends

Ethanol in Gasoline

Heavy Duty Vehicle Emission Reduction Measures

# BT&H Table 2 Strategies

## Business, Transportation & Housing

Additional Travel Reduction Measures

Smart Land Use

# CEC/CPUC Table 2 Strategies

## Public Utilities Commission/Energy Commission

Additional Energy Efficiency Programs

## Energy Commission

Increased Use of Blended Cement

Combined Heat and Power Initiative

# CIWMB Table 2 Strategies

## Integrated Waste Management Board

Landfill Methane Capture

Zero Waste – High Recycling

# CDEFA Table 2 Strategies

## Department of Food & Agriculture

Conservation tillage/cover crops

Enteric Fermentation

# Resources Table 2 Strategies

## Resources Agency

Forest Management Projects

Reforestation Projects

Conservation Projects

Water Management

Fire Management

# **Green Box Programs and Technology Measures**



# Public Comment and Dialogue

# Table 3 – Implementation Options

<b>Programmatic</b>
Programs implemented by agencies. Examples of existing programs include: ARB's motor vehicle regulations, energy efficiency standards and Renewable Portfolio Standard
<b>Cap and Trade</b>
Climate change emission cap established for industrial sectors. Trading allowed for flexibility.
<b>Climate Change Emission Fee</b>
Fee assessed based on climate change emissions. Proceeds could be used to provide incentives or otherwise fund emission reduction projects, or to reduce fees or taxes (be revenue-neutral).
<b>Fuel and Imported Electricity Fee</b>
Fee assessed on sales of petroleum, natural gas, coal and electricity purchased from out of state. Proceeds could be used to provide incentives or otherwise fund emission reduction projects, or to reduce fees or taxes (be revenue-neutral).
<b>Climate Trust Program</b>
Modeled on Oregon and Washington program. New power plants required to achieve an intensity standard set below what a conventional power plant can achieve. New conventional power plants would need to create offsets or purchase offsets.
<b>Voluntary Emission Reduction Program</b>
No requirements to reduce emissions. Participants work with the state to establish agreed-upon emission reduction activities in support of the Governor's statewide targets.

# Accountability

- Voluntary Registry
- Mandatory Reporting
  - California Climate Action Registry
  - Air Pollution Control Districts



# Public Comment and Dialogue

# Next Steps

- ❑ Climate Action Team to Continue to Evaluate Potential Strategies and Implementation Options
- ❑ Continue Open Public Process
- ❑ Draft Report Released Early December
- ❑ Final CAT Public Meeting December 13
- ❑ Report to Governor January 2006