

AB 32: The California Global Warming Solutions Act of 2006

Scoping Plan Sector Workshop

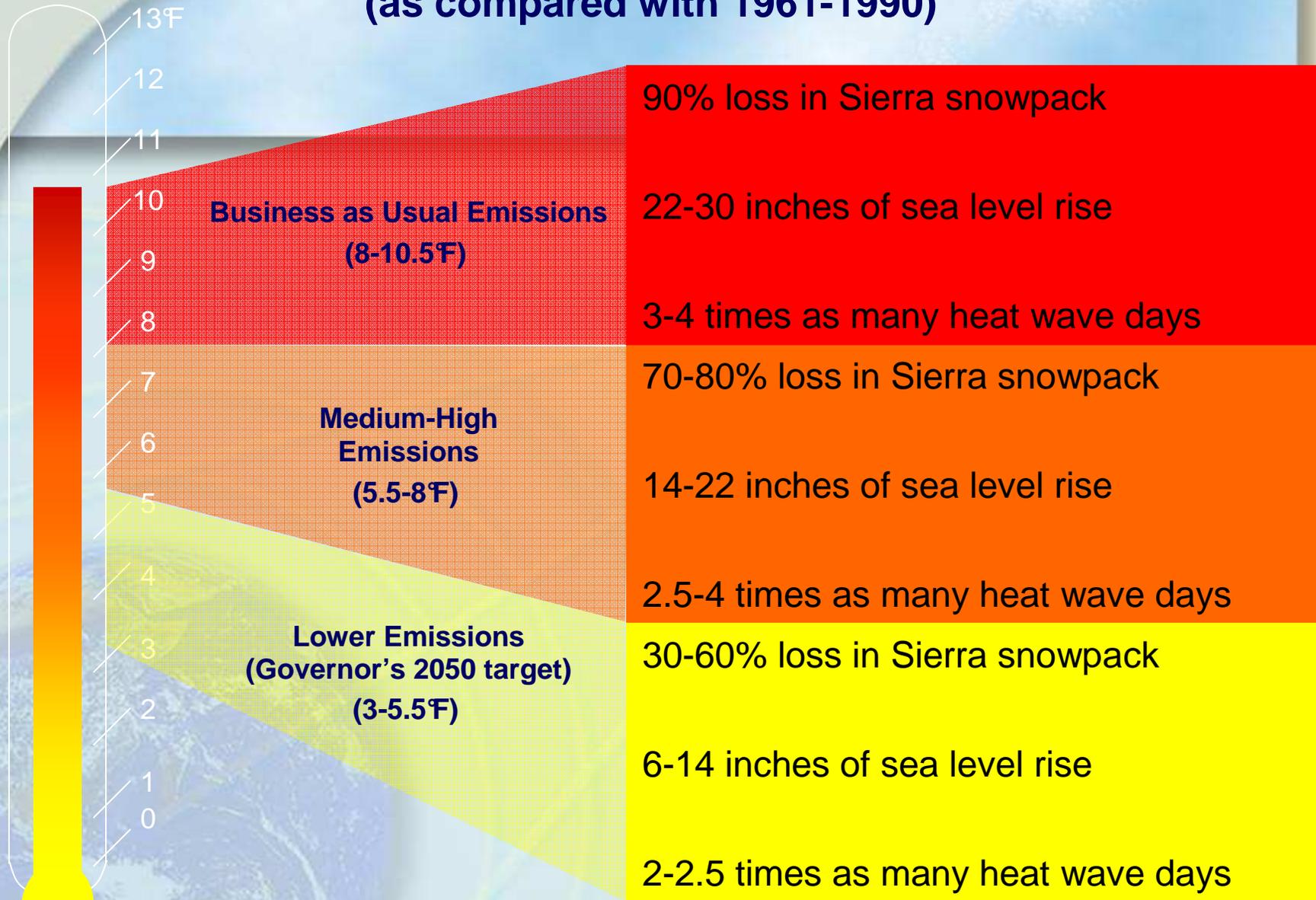
Scoping Plan Workshop Series
December 14, 2007

California Air Resources Board

Workshop Overview

- Introduction
- Background
 - AB 32 and Scoping Plan background
 - Structure of the day
 - California overview
- Sector Presentations

Projected Global Warming Impact on California, 2070-2099 (as compared with 1961-1990)

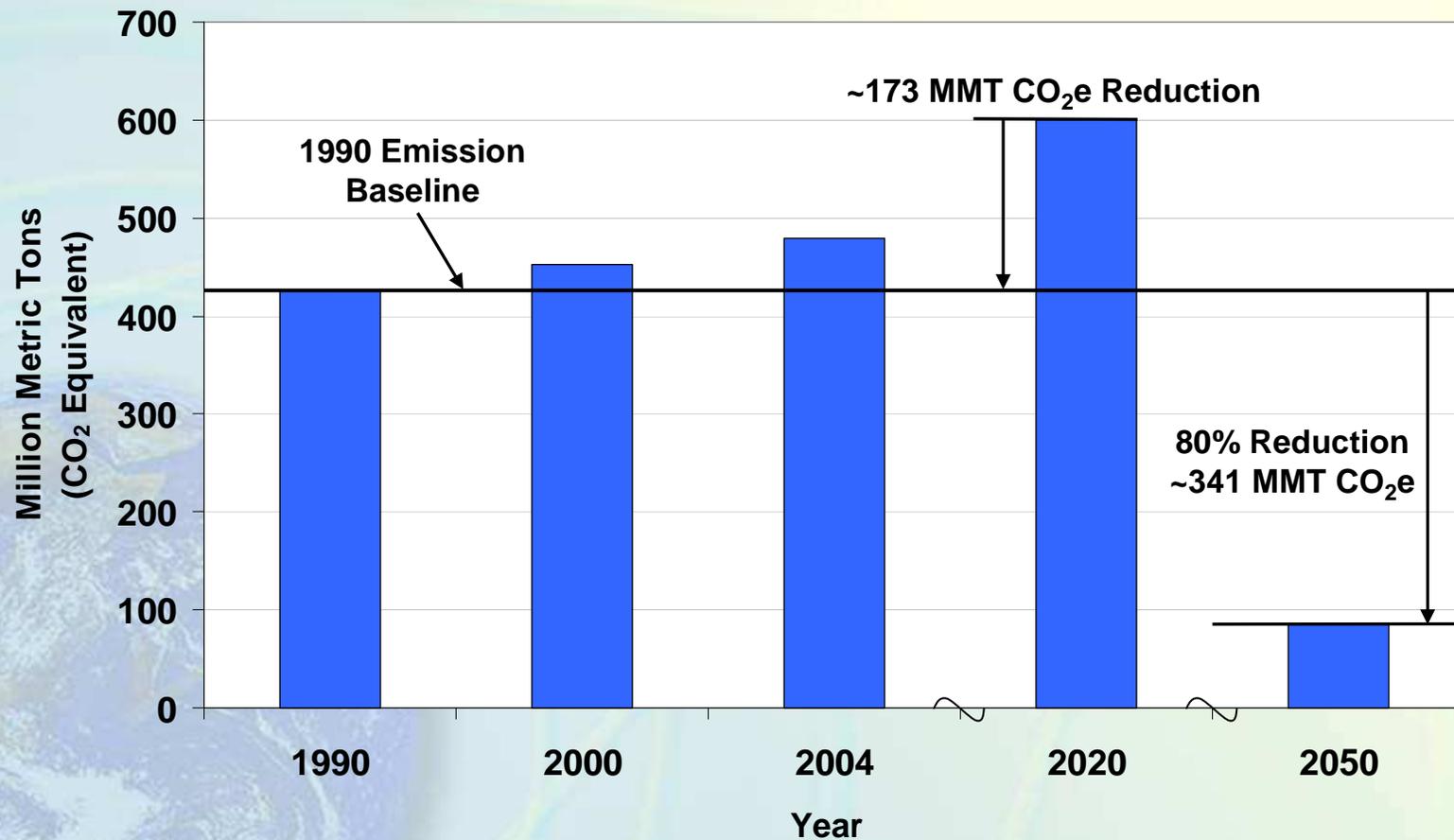


What Is AB 32?

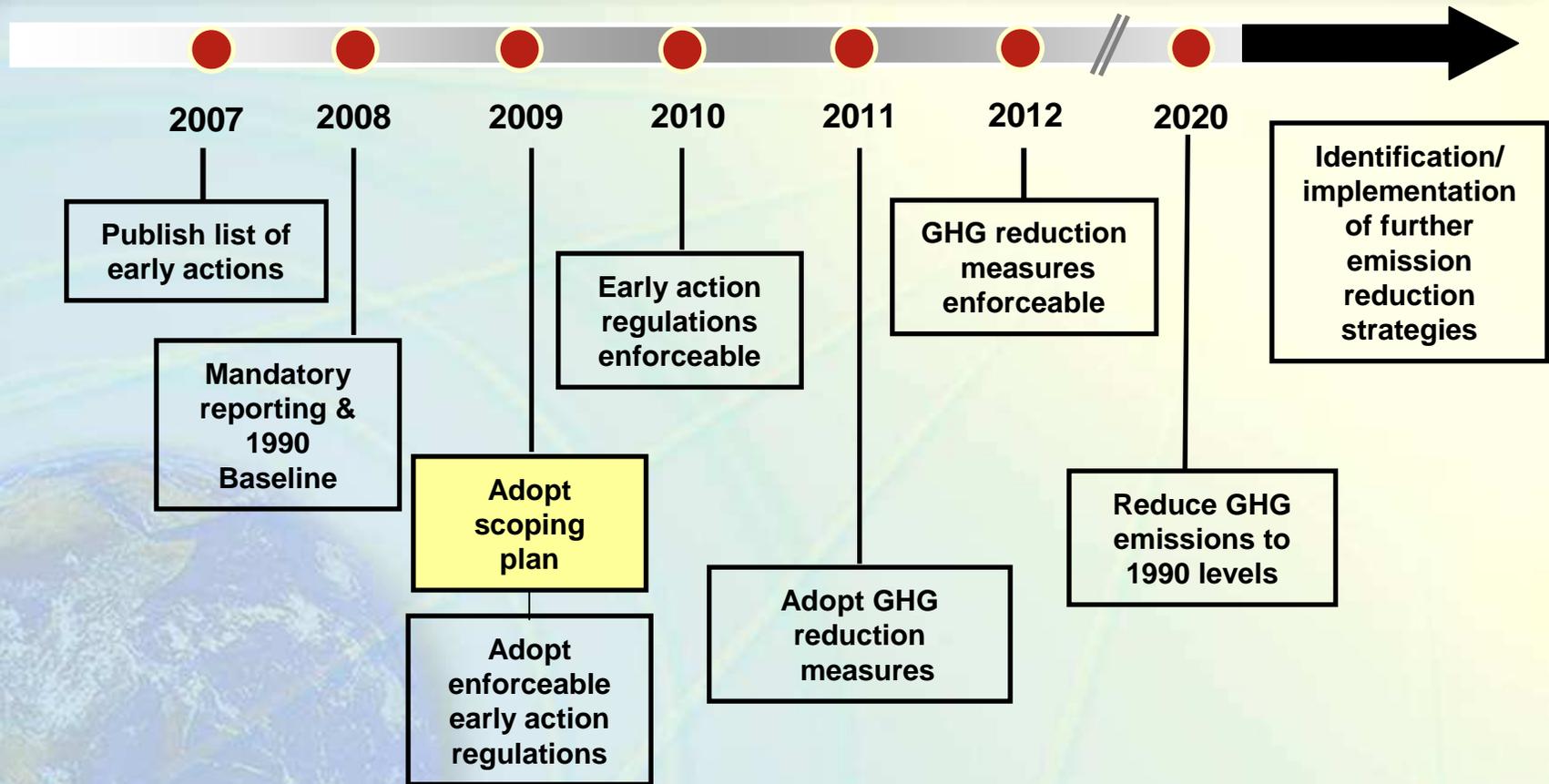
- Sets in statute 2020 GHG emissions limit at 1990 level
 - Acknowledges that 2020 is not the endpoint
- ARB to monitor/regulate GHG sources
- Air Resources Board lead, but extensive collaboration with other agencies
- Mandates that a Scoping Plan be adopted by January 1, 2009

Magnitude of the Challenge

ARB Emissions Inventory



AB 32 Timeline



Scoping Plan

- Describe how California will reduce GHG emission levels to 1990 levels by 2020
- Provide a vision for a low carbon future - 2020 and 2050
- Establish California's leadership on addressing climate change, yet consider other GHG programs
- Maximize benefits to California
 - Criteria and toxic air pollutant co-benefits
 - Economic development
 - Community participation
- Prerequisite for regulatory requirements

How Will the Scoping Plan Be Developed?

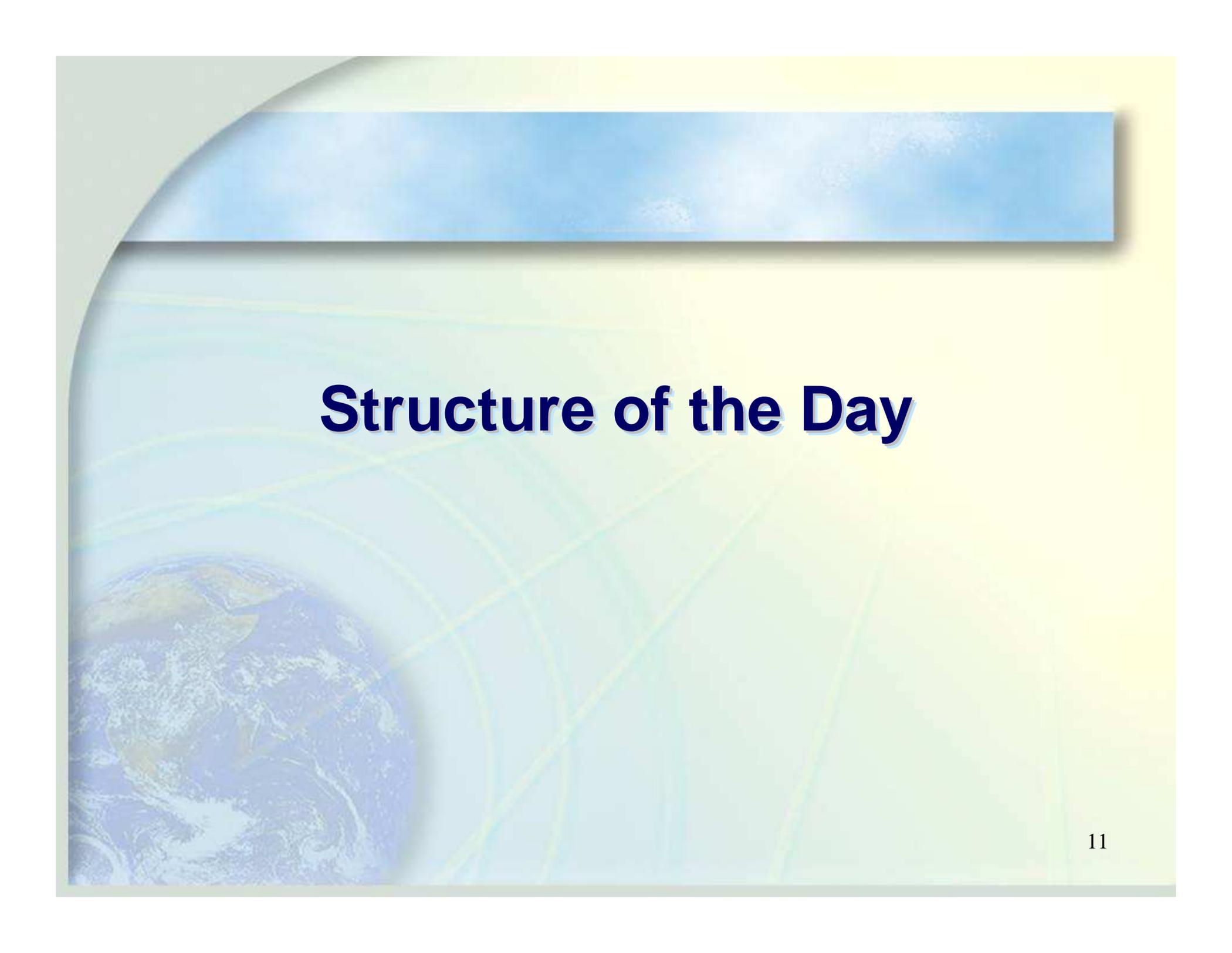
- Identify maximum technologically feasible and cost-effective measures
- Assess possible mechanisms to achieve reductions
- Evaluate scenarios to achieve the 2020 limit
- Develop recommendations for the draft staff report

Tentative Scoping Plan Development Schedule

Nov 30, 2007	Scoping Plan Kick-Off Workshop
Dec 6, 2007	Board Hearing - 1990 Baseline, Mandatory Reporting
Dec 14, 2007	Sector Summary Workshop (Sac)
Jan 16, 2008	Mechanisms Workshop (Oakland)
April 4, 2008	Scoping Plan Scenarios Workshop (Sac)
June 2008	Draft Scoping Plan released
July 2008	Workshops on draft plan (Statewide)
Oct 2008	Final Staff Proposal released
Nov 20-21, 2008	Board Hearing - Scoping Plan

Opportunities for Participation

- Scoping Plan Workshop Series
- Stakeholder workgroups
- Individual regulatory proceedings
 - Discrete Early Action Measures
 - Subsequent regulatory actions
- ARB Community Outreach Efforts
- Advisory Committees
 - ETAAC
 - EJAC
- Draft Scoping Plan workshops
- Board Hearing



Structure of the Day

Today's Sector Breakdown

- Energy
 - Generation
 - Efficiency
 - Water/Energy
- Transportation
 - Vehicles
 - Fuel
 - Goods Movement
- Business and Industry
 - Cement
 - Oil and Gas Production
 - Refineries
 - Waste
 - Semiconductor Industry
 - High-GWP

Today's Sector Breakdown

- Forests
- Agriculture
 - Manure Management
 - Soils
 - Livestock
 - Efficiency
- Land Use and Local Initiatives
 - Vehicle Use
 - Local Communities
 - Buildings – Commercial and Government
 - Residential Use

Presentation Outline

- Sector Emissions
- Sector Profile
- Existing Controls
- Emission Reduction Approaches
- Potential Emission Reduction Measures
- Discussion
 - Q&A period following each presentation (as time permits)
 - Panel of state agency experts
 - Contact list on ARB CC website for further questions

The background features a stylized globe on the left side, showing continents and oceans. A horizontal blue bar with a white, cloud-like texture is positioned at the top. The overall color palette is light blue and yellow. The text 'California Overview' is centered in a bold, dark blue font.

California Overview

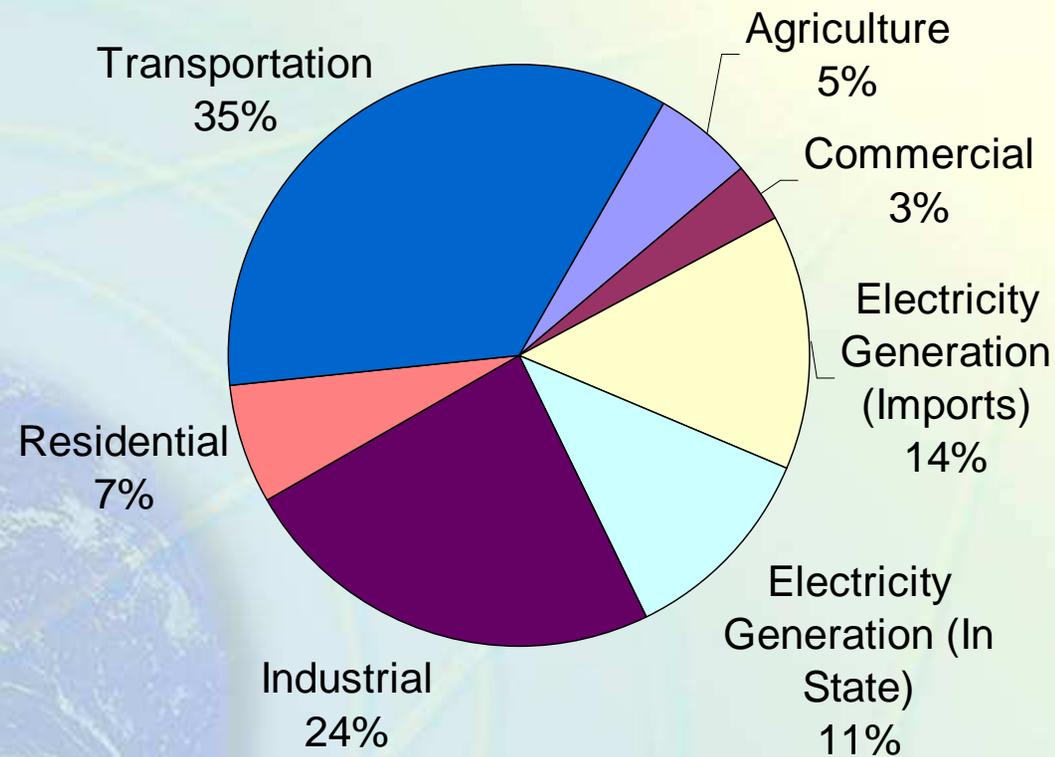
California Overview

- Population: 37 million
- Gross State Product: \$1.62 trillion
 - 8th largest economy in the world
- GHG emissions*
 - 12th highest compared to countries**
 - 2nd highest U.S. state – gross***
 - 2nd lowest state - per capita (11.7 MT/person)
 - 4th lowest state - GHG intensity (0.3 MT/ thousand \$ GSP)

*2003 CO₂-only data, excluding imported electricity and forestry sinks. California data from ARB GHG Emissions Inventory (<http://www.arb.ca.gov/cc/ccei/emsinv/emsinv.htm>), state and country data from World Resources Institute Climate Analysis Indicators Tool (<http://cait.wri.org/>)

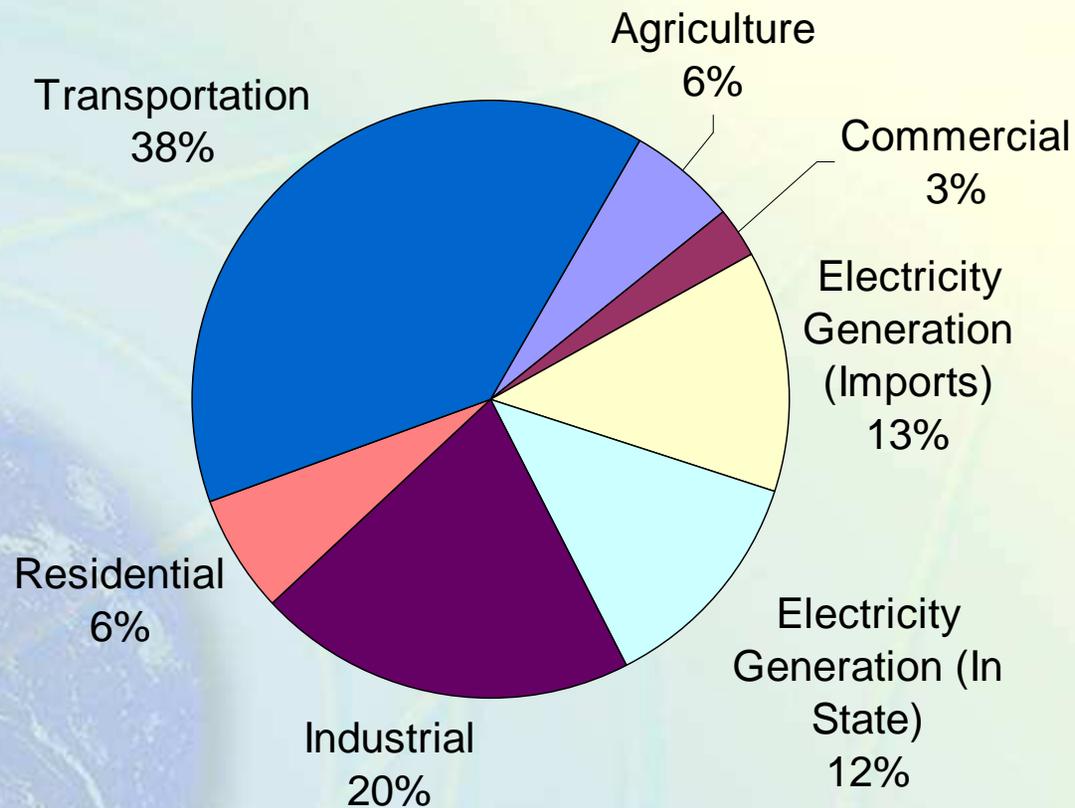
California GHG Emissions

1990 Emissions (427 MMT CO₂E)



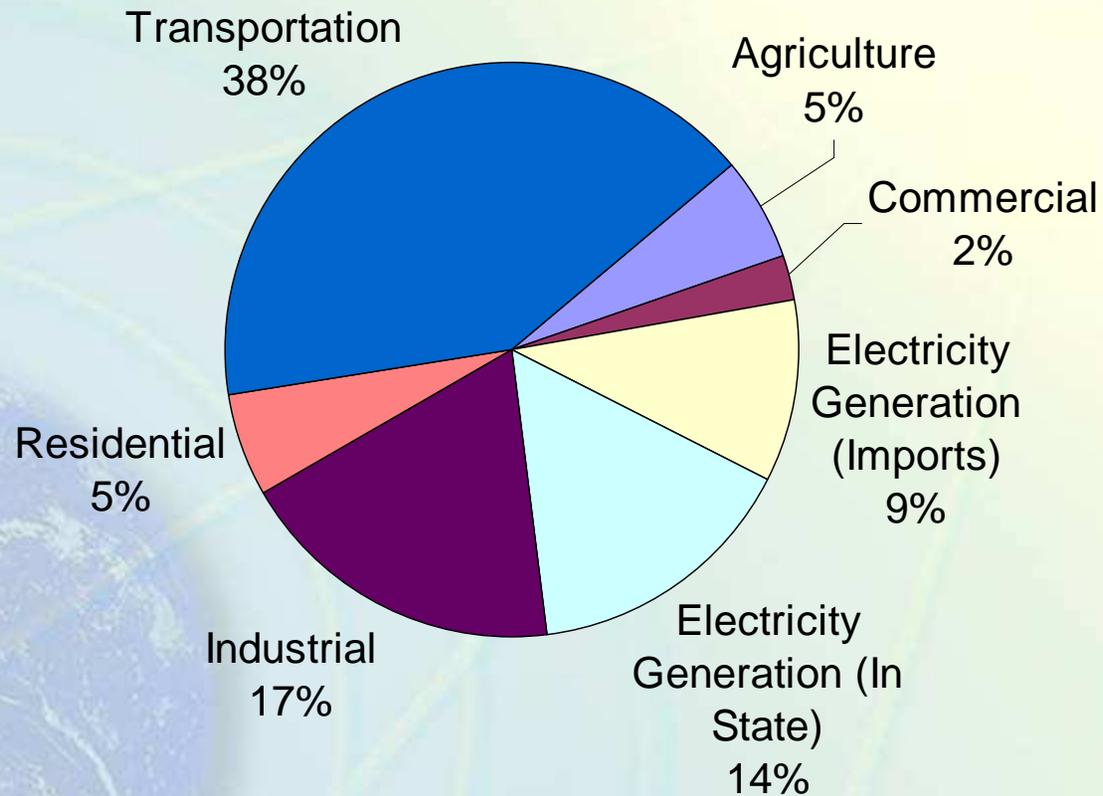
California GHG Emissions

2004 Emissions (480 MMT CO₂E)



California GHG Emissions

2020 Business as Usual (600 MMT CO₂E)



Policy Options

- Many possible approaches
 - Direct Regulations
 - Alternative Compliance Mechanisms
 - Market-Based Mechanisms
 - Cap & trade
 - Offsets
 - Other Mechanisms
 - Incentives
 - Fee-bates
 - Voluntary actions
 - Carbon fee
- January 16 workshop dedicated to Mechanisms

Additional Information and Contacts

- ARB Climate Change Web Site
 - <http://www.arb.ca.gov/cc/cc.htm>
 - Stay informed - sign up for list serve
- California Climate Change Portal
 - <http://www.climatechange.ca.gov>
- ARB and other agency contact list
 - <http://www.arb.ca.gov/cc/contacts/contacts.htm>