AB 32: The California Global Warming Solutions Act of 2006

An overview presented to the

California Air Resources Board

October 19, 2006

Overview

Background

AB 32

Approach, Timeline, Plan, Regulations

Implementation

Implications for Board

Summary

Background

climate
CHANGE
California Environmental Protection Agency
AIR RESOURCES BOARD

Governor's Executive Orders

Greenhouse gas reduction targets

By:

- **2010 reduce to 2000 levels***
- **2020 reduce to 1990 levels****
- **2050 reduce to 80% below 1990 levels**

* *Equals approximately 60 million tons emission reduction, 11% below business as usual*

** *Equals approximately 174 million tons emission reduction, 30% below BAU*

Governor's Executive Orders

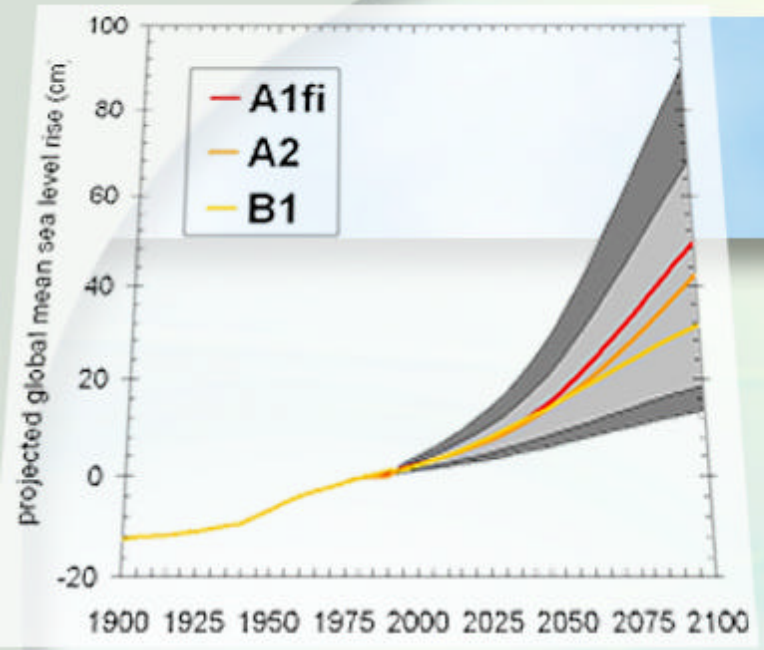
Executive Order S-17-06 signed on October 16, 2006

Cal/EPA Secretary continues leadership role

Secretary to establish Market Advisory Committee

ARB to collaborate with Secretary and Climate Action Team to develop market-based program

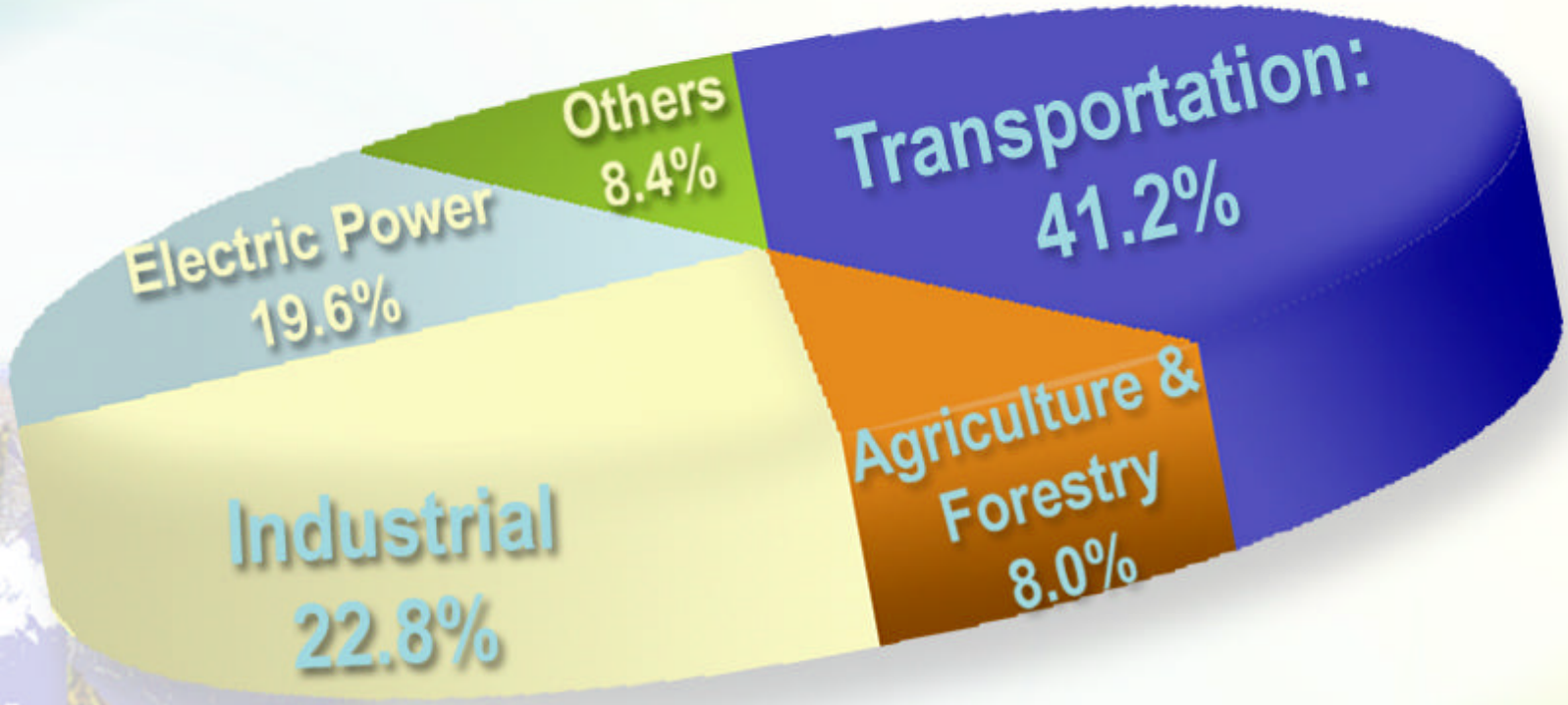
Climate Impacts



California Projected Impacts

- 75% loss in snow pack
- 1-2 foot sea level rise
- 70 more extreme heat days/year
- 80% more ‘likely ozone’ days
- 55% more large forest fires
- Twice the drought years

California
Climate Change Emissions



climate CHANGE

California Environmental Protection Agency
AIR RESOURCES BOARD

Climate Action Team

Multi-agency team of Department Directors

Chaired by Cal/EPA Secretary

Charged with recommending strategies

Report released April 2006

- **Ambitious targets are achievable**
- **More than 40 strategies identified**
- **Good for the economy (jobs, technology development)**

CARB Reduction Strategies

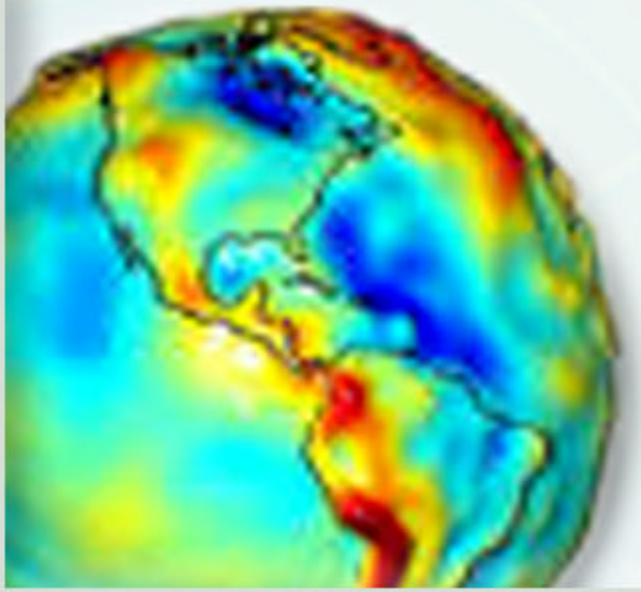
	2020 (MMT)[1]
Vehicle climate change standards	30 ☑
Other new light duty vehicle technology improvements ("Pavley 2")	4
Diesel anti-idling	1.2 ☑
HFC reduction (incl. non-vehicular)	8.5
Transport refrigeration, off-road electrification, port electrification	<1
Manure management	1

[1] million metric tons

CARB Reduction Strategies

	2020 (MMT)
Semiconductor industry targets (PFC)	2
Alternative fuels: Biodiesel blends	<1
Alternative fuels: Ethanol	3.2
Heavy duty vehicle emission reduction	3
Reduced venting and leaks in oil and gas systems	1
Hydrogen highway	Included

Global Activity



- Kyoto Protocol
- Tony Blair agreement
- Europe
- Japan
- Emerging Countries
- RGGI
- Western States

Media Coverage

AB 32 Approach

Sets in statute Governor's 2020 target

ARB is state agency charged with monitoring/regulating sources of emissions of greenhouse gases in order to reduce emissions

Climate Action Team continues to coordinate statewide climate policy

AB 32 Timeline

1/1/07: ARB maintains statewide inventory

6/30/07: List of discrete early actions

1/1/08: Mandatory reporting of emissions
Adopt 1990 baseline/2020 target

1/1/09: Scoping plan of reduction strategies

1/1/10: Regulations to implement early action items

1/1/11: Regulations to implement scoping plan

Discrete Early Actions

Stand-alone measures that can be implemented prior to primary program

- **Make progress while planning**
- **Address sources not closely tied to market mechanisms**

Publish list by June 30, 2007

Regulations to be enforceable by January 1, 2010

Emission Reporting and Emission Limit

By January 1, 2008:

Approve Statewide Emission Limit

Adopt emission reporting and verification requirements

ARB Implementation Plan

ARB to develop Scoping Plan by January 1, 2009

Describes how ARB will achieve reductions

Consider programs in other states and nations

Evaluate total potential costs and benefits of plan to economy, environment and public health

Other State Agency Obligations

Continued Role on Climate Action Team

Progress towards reductions in Climate Action Team report

Collaboration with ARB on Market-Based System

Market-Based Mechanisms

What is included:

- System of market-based declining annual aggregate emission limits
- GHG emissions exchanges, banking, credits, and other transactions that result in the same reduction as direct compliance

Intended to facilitate achievement of cost-effective reductions

Market-Based Mechanisms

Reductions must be real, quantifiable, verifiable, additional, enforceable by ARB

ARB must consult with PUC regarding effect on electricity and natural gas providers

Must minimize "leakage"

No geographic boundaries

Market-Based Mechanisms

Consider potential for localized impacts

Prevent increases in criteria pollutants or toxic air contaminants

Maximize additional environmental and economic benefits

Criteria for Rulemaking

Design regulations to be equitable, minimize cost, encourage early action

No disproportionate impact on low-income communities

Credit for early voluntary reductions

Complement criteria pollutant strategies

Criteria for Rulemaking

Consider cost-effectiveness

Consider overall societal benefits

Minimize administrative burden

Consider significance of sources and source categories

Other Provisions

No effect on PUC authority

No effect on obligation of utilities to provide customers with safe and reliable electric service

No limitation or expansion of air district authority

ARB given fee authority

Other Provisions

GHG passenger vehicle regulation gives largest reduction of any measure

If regulation found invalid, ARB to achieve equivalent or greater reduction through alternative regulations to control mobile sources

Goals

- Create model that is copied by other states and nations
- Develop least cost approach
- Generate economic benefits due to improved efficiency and business creation
- Co-benefits (e.g., additional reductions in criteria and toxic emissions)
- Reduce emissions to 1990 levels by 2020

Implementation

Implementation

Assemble team (existing and new staff hires, external experts)

Open, transparent process

Intensive consultation

- **Cal/EPA**
- **Climate Action Team**
- **National and international experts**
- **Broad list of stakeholders**

Implementation

Governor's Market Advisory Committee

ARB Advisory Committees

- **Environmental Justice**
- **Economic and Technology Advancement**

Compatibility with other jurisdictions

Need to look outward

Implications for Board

Whole new arena

Be inclusive

Significant expansion into leadership role on Climate Change issues

National and international collaboration

Scrutinized for early signals on program direction

Summary

Major initiative with new responsibilities

Significant progress on reducing GHG Emissions

Develop model program others will use

Market-based mechanism is key element

Summary

- Local, state, national, and international stakeholder participation
- Numerous requirements for next several years
- Assembling team and reaching out to experts
- Efforts should not take away from other ARB goals and priorities.