

# Climate Change Proposed Scoping Plan

## Richmond Community Meeting

November 10, 2008  
California Air Resources Board



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## Today's Presentation

- Overview of the ARB
- AB 32: The Global Warming Solutions Act of 2006
- Proposed Scoping Plan
- Next Steps

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## California Air Resources Board



- **Part of Cal/EPA**
  - Air Resources Board
  - Dept. of Toxic Substances Control
  - Waste Management Board
  - State Water Resources Board
  - Department of Pesticide Regulation
  - Office of Environmental Health Hazard Assessment
- **900+ technical staff**
- **Eleven appointed Board members**
  - Chairman – full time

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## ARB Control Programs

- **Criteria pollutants**
  - Car/light-truck regulations, stationary sources
- **Diesel Risk Reduction Plan**
  - Trash trucks, publicly-owned trucks, construction and industrial equipment, stationary engines/ag engines, diesel trucks (Fall 2008)
- **Goods Movement Emission Reduction Plan**
  - Cargo-handling equipment, drayage trucks, shore-side power for ships, locos, operational efficiency
- **GHG Controls**

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## ARB & EJ Issues

- Adopted EJ Policies and Actions

December 13, 2001

- Commit to make environmental justice considerations a standard practice
- Requires how proposed major programs, policies and regulations treat people of all races, cultures, geographic areas and income levels, especially low-income and minority communities
- Strengthen outreach to local communities
- Work to meet air quality standards and reduce health risks from toxic air contaminants

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## Climate Impacts

### California Projected Impacts

75% loss in snow pack

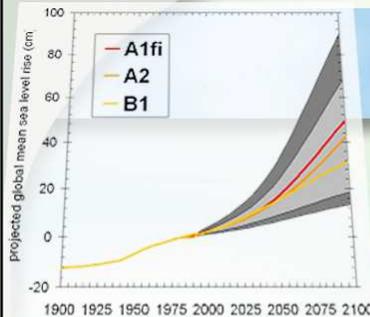
1-2 foot sea level rise

70 more extreme heat days/year

80% more 'likely ozone' days

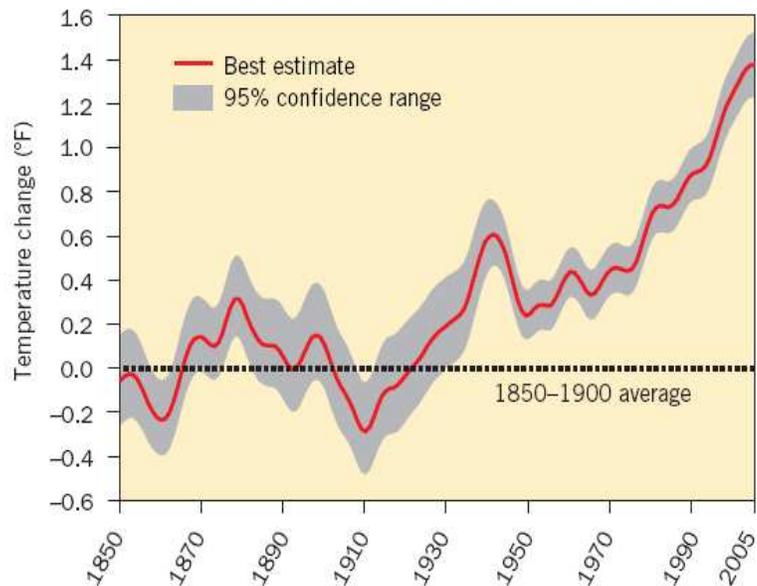
55% more large forest fires

Twice the drought years



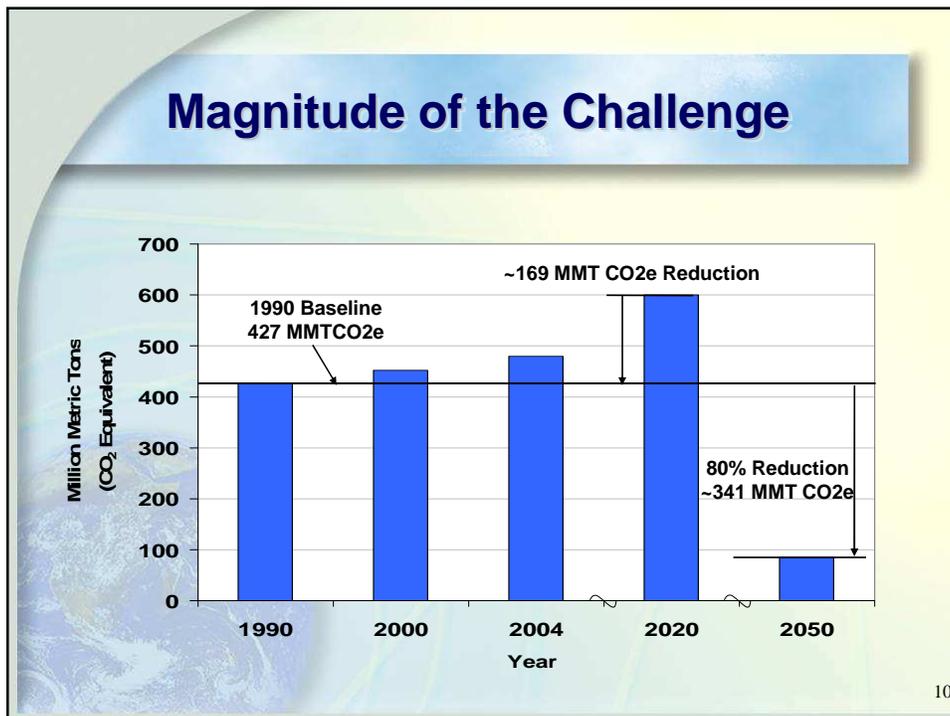
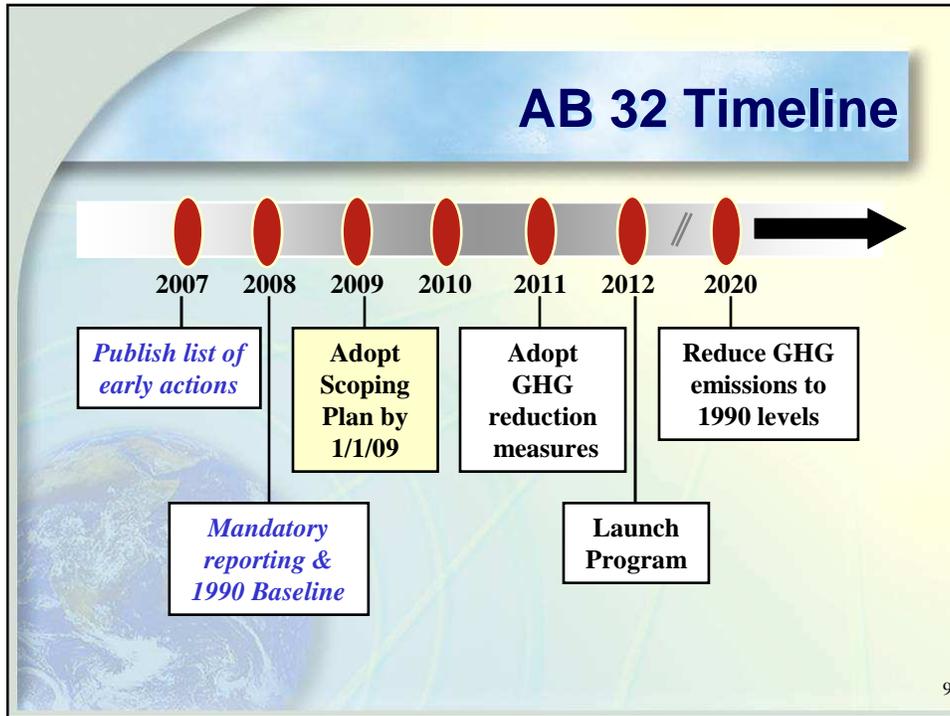
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## Global Temperatures Since 1850

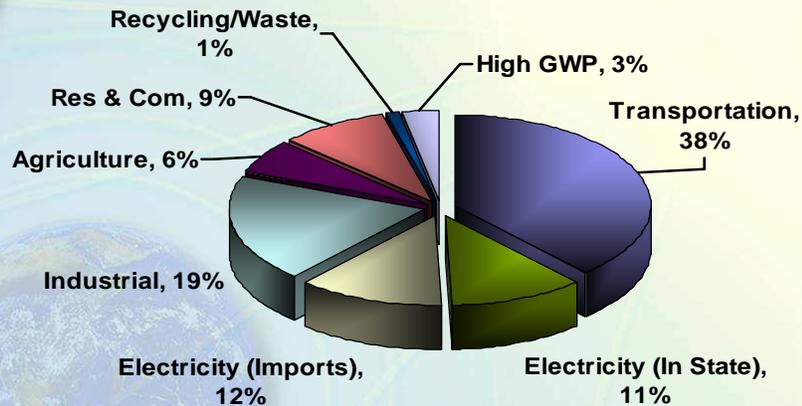


## What Is AB 32?

- **Global Warming Solutions Act of 2006**
  - Legislation requiring reductions in greenhouse gas (GHG) emissions
  - Sets 2020 GHG limit at 1990 level
  - Acknowledges that 2020 is not the endpoint
  - ARB to monitor/regulate GHG sources
  - Creates Environmental Justice Advisory Committee



## 2002-2004 GHG Emissions (469 MMTCO<sub>2</sub>E)



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## Scoping Plan Development

- Draft Scoping Plan – June '08
- Input before and after Draft Plan released
  - Workshops, Community/Stakeholder Meetings
  - Written comments
- Worked with Climate Action Team
- Economic & Public Health Evaluations – Sept '08
  - Workshop and comments
- *Released Proposed SP – October 15, 2008*
  - Opened comment period on Proposed Plan and CEQA document
- October 23, 2008
  - Provided update to Board

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## What the Plan Recommends

- Mix of strategies that combine market mechanisms, regulations, voluntary measures, and fees
  - Cap on 85 percent of emissions
  - Complementary measures:
    - Energy efficiency programs
    - Renewable energy
    - Targets for transportation-related emissions
    - Existing laws and policies (e.g. Pavley, LCFS)
    - Targeted fees

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## Recommended Actions Cap-and-Trade

- Firm cap on emissions
- California program linked to western region
- Electricity and industrial sectors in 2012
  - Add Transportation and Natural Gas in 2015
- Transition to 100% auction of allowances worthwhile goal
- Offsets limited to less than half of required reductions
- Will seek input from broad range of experts on use of revenue
- Rulemaking will include evaluation of best ways to protect vulnerable communities

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## Sector-Specific Measures

### CAPPED SECTORS

- **Transportation** (Pavley, LCFS, regional VMT targets)
- **Electricity/Energy** (Efficiency, 33% renewables, million solar roofs, solar water heating)
- **Industry** (Combustion sources)

### UNCAPPED SECTORS

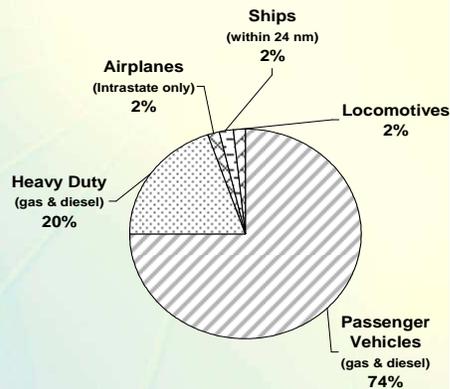
- **High Global Warming Potential Gases** (New products and existing banks)
- **Industry** (Fugitive emission sources)
- **Forests** (Preserve sequestration, biomass utilization)
- **Recycling & Waste** (Landfill methane, high recycling/zero waste)
- **Agriculture** (Methane capture at large dairies)

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## Capped Sectors

### Transportation:

- Pavley I and II (standards for light duty vehicle)
- Low carbon fuel standard
- Regional transportation-related GHG targets
- Efficiency measures for cars
- Improved efficiency of heavy duty trucks
- Goods movement efficiency measures
- High speed rail



Percent of transportation sector emissions in 2004

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## SB 375 Landmark Legislation

*"In order to reach California's greenhouse gas goals we must rethink how we design our communities"*

(From Governor's Office Fact Sheet on SB 375)

SB 375 basics:

- Coordinates California transportation, land use, housing and greenhouse gas planning
- Requires ARB to establish regional passenger vehicle greenhouse gas reduction targets for 2020 and 2035
- Requires regional planning efforts to identify ways to meet the targets
- Gives builders incentives to provide sustainable developments that help plans meet the targets

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## Land Use Planning

- Reduce VMT and GHG emissions
- Reward "Smart Growth" Planning
  - Denser housing, closer to retail & transit centers
- 17 State Metro Planning Areas:
  - Adopt "sustainable community plans"
  - Encourage denser developments – less driving
- First crack at \$5 billion in yearly transport funds
- Streamlined environmental & zoning rules

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## Capped Sectors

### Energy:

- Increase energy efficiency programs
- More stringent building and appliance standards
- Million Solar Roofs Program
- Residential solar water heaters
- Encourage combined heat & power
- Achieve 33 percent RPS for all utilities

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## Capped Sectors

### Industrial Sources:

- Energy efficiency audit
- Refineries
  - Removal of methane exemption
  - Limits on flaring
  - Refinery Technical Working Group
- Oil and gas transmission (fugitives)
- Oil and gas extraction (fugitives)

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## Uncapped Sectors

### High Global Warming Potential (GWP) Gases:

- Used in refrigerators, air conditioners, fire suppression and insulating foam
  - More potent greenhouse gases
- Possible approaches:
  - Standards to prevent leakage
  - New products and existing banks
  - Recovery and proper destruction of high GWP

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## Uncapped Sectors

- Recycling and Waste
  - Reduce landfill methane; increased diversion, recycling and composting
- Forests
  - Preserve forest sequestration
- Agriculture
  - Methane capture at large dairies (voluntary)
- Industry
  - Sources less than 25K metric ton CO<sub>2</sub>E

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## Economic Benefits

- Create jobs and save households money
- Position CA to more sustainable future
  - Energy efficiency and clean technology
- Additional evaluation during regulatory development

Economic Production	↑	<b>\$33 billion</b>
Overall Gross State Product	↑	<b>\$7 billion</b>
Overall Personal Income	↑	<b>\$16 billion</b>
Per Capita Income	↑	<b>\$200</b>
Jobs	↑	<b>100,000</b>

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## Public Health Benefits

- Plan builds on existing ARB programs to improve public health statewide
- Avoid 400 premature deaths in 2020
  - \$2.2 billion in air-quality public health benefits
- Additional benefits from local and regional transportation measures
  - Facilitate moderate physical activity

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## Future Public Health Evaluations

- AB 32 requires measures that:
  - Prevent increase in criteria or toxics emissions
  - Do not disproportionately impact low-income communities
  - Complement federal & state air quality programs
- Initiate a process to identify communities adversely impacted by air pollution
  - Screening tool currently under development
- Will evaluate potential localized impacts of regulations to avoid negative impacts

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## CEQA

- ARB included CEQA evaluation of Scoping Plan's potential environmental impacts
- Greenhouse gases subject to CEQA (SB 97, 2007)
  - Governor's Office of Planning and Research
    - Drafting CEQA guidelines for greenhouse gases
    - Asked ARB to recommend method for setting thresholds of significance
  - Preliminary ARB staff proposal released Oct 24<sup>th</sup>
  - Workshop Oct 27<sup>th</sup> to initiate public discussion
  - Additional workshop later this year
  - Staff proposal to ARB Board in January 2009

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## Preliminary Staff Proposal

- Provides an interim statewide approach for non-zero thresholds
- Focuses specifically on industrial and residential/commercial projects
- Depends on significant and meaningful participation from the public, stakeholders, and local lead agencies

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## Proposed Thresholds of Significance

- Industrial Projects
  - Quantitative standard of 7,000 MTCO<sub>2</sub>E/yr for operational emissions (excluding transportation)
  - Performance standards for transportation and construction
- Residential and Commercial Projects
  - Performance standards for energy, water, waste, transportation and construction
  - Upper limit on project emissions

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## GHG Reporting, Tools, Verification

- Mandatory reporting
  - begins in 2009 on 2008 emissions
  - Verification is optional in 2009
  - Gradual implementation
  - 12/08 workshop to demonstrate on-line tool
  - ARB developing reporting guidance document
- Reporting System - ARB coordinating with air districts who want a software interface for district and ARB data reporting
- Verification required beginning 2010 – ARB working with Districts on accreditation

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## ARB and Local Air Districts

- Cooperative implementation of AB 32
- District as local advocate for clean air
- Source specific regulation and enforcement
- High global warming potential gas rules
- Reporting and Verification
- Technical assistance and outreach to local government
- CEQA and mitigation projects

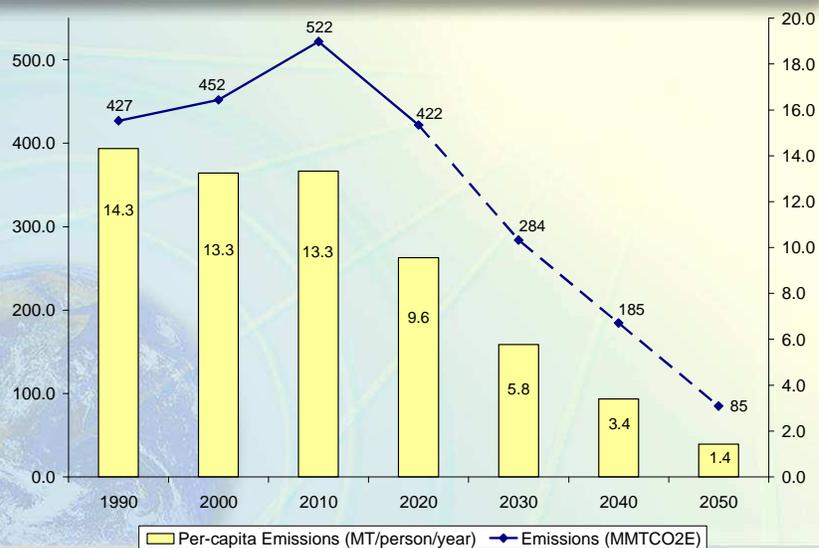
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## Education and Workforce Development

- Career Technical Education
- Skilled workers for green jobs
- Involve higher education institutions for next generation of engineers, scientists and business leaders
- AB 3018: Green Collar Jobs Council

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## Moving Toward 2050 A Clean Energy Future



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## Scoping Plan Implementation

- Two years to adopt AB 32 measures
  - Regulatory development will follow normal public process
  - Extensive stakeholder outreach and involvement
  - Additional economic and non-economic analyses
- Implementation and enforcement critical
- Required to re-visit Scoping Plan in 5 years

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## Next Steps

- November 20, 2008
  - Public Hearing to discuss Proposed Scoping Plan
- December 11, 2008
  - Board vote on Proposed Scoping Plan
- January 2009
  - Workshop on program design approaches to address potential localized impacts

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## Refinery Technical Working Group

- **Purpose:**
  - Review specific refinery processes to better understand opportunities and challenges for reducing GHG emissions.
  - Representatives from industry, local air districts, U.S. EPA, EJ and environmental organizations, and ARB.
- **Date:** January 2009
- **Contact:**  
Mike Waugh  
916-445-6018  
mwaugh@arb.ca.gov

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## References

Download the Proposed Scoping Plan:

<http://www.arb.ca.gov/cc/scopingplan/document/scopingplan/document.htm>

ARB's Climate Change Website:

<http://www.arb.ca.gov/cc/cc.htm>

California's Climate Change Website:

<http://climatechange.ca.gov/>

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