

AB 32: Overview of California's Scoping Plan


AB 32 Toolkit for Local Government
Green California Summit and Exposition
March 16, 2009

Summary of AB 32
California's Climate Change Scoping Plan

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California Air Resources Board
California Environmental Protection Agency

California's GHG Reduction Targets
June 2005

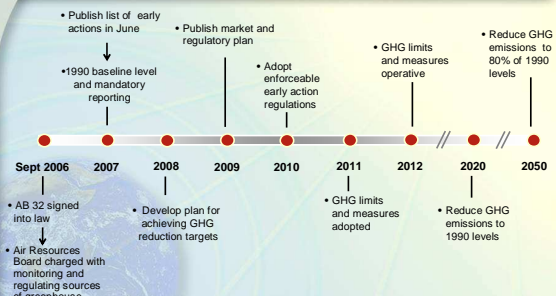


2020: Reduce to 1990 levels (169 MMT, 28% below BAU)
2050: Reduce 80% below 1990 levels.

We're not doing this alone!

Air Resources Board ↔ Climate Action Team coordinates State's overall climate policy

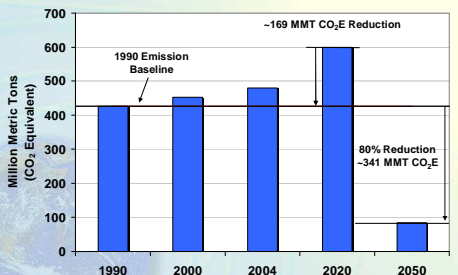
Overview of AB 32
California Global Warming Solutions Act



- Sept 2006: AB 32 signed into law; Air Resources Board charged with monitoring and regulating sources of greenhouse gases in order to reduce emissions.
- 2007: Publish list of early actions in June; 1990 baseline level and mandatory reporting.
- 2008: Develop plan for achieving GHG reduction targets.
- 2009: Publish market and regulatory plan.
- 2010: Adopt enforceable early action regulations.
- 2011: GHG limits and measures adopted.
- 2012: GHG limits and measures operative.
- 2020: Reduce GHG emissions to 1990 levels.
- 2050: Reduce GHG emissions to 80% of 1990 levels.

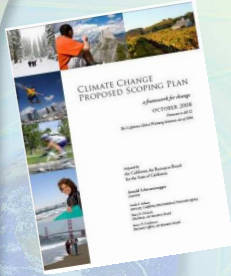
Magnitude of the Challenge
California's GHG Reduction Targets

ARB Emissions Inventory



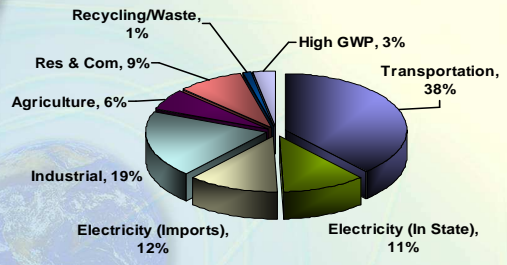
Source: California Air Resources Board

Climate Change Scoping Plan
A Framework for Change



- California's Plan to Achieve GHG Reduction Targets
- Adopted By the Board in December, 2008
- Mix of Strategies that Combine:
 - Market Mechanisms, Regulations, Voluntary Measures, and Fees

California's GHG Emissions
2002-2004 Average (469 MMT CO₂e)

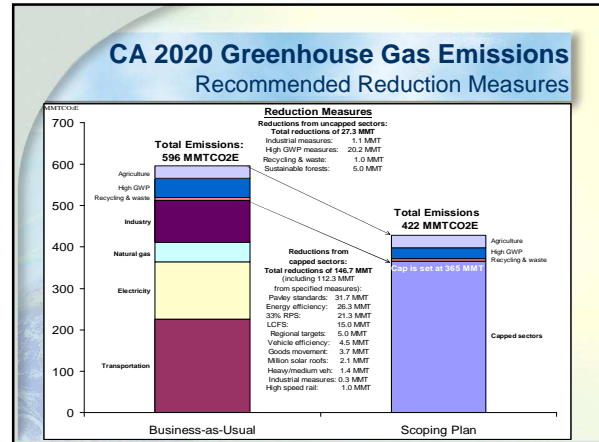


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Climate Change Scoping Plan Measures to Achieve the 2020 Target

- Broad-based Cap & Trade Program
 - Electricity, Industry, Transportation Fuels, Natural Gas
- Complementary Measures
 - State, Regional and Local Partnerships
 - Transportation- Engine Efficiency, Fuels, Vehicle Use
 - Energy Efficiency Programs
 - Renewable Energy
 - Green Building Strategy
 - High Global Warming Potential Measures
 - Targeted fees

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Actions Adopted To Date AB 32 Background

- Pavley AB 1493 automobile rule: Sept. 04
- Ship electrification in ports: Dec. 07
- Port and rail yard cargo trucks: Dec. 07
- High GWP in consumer products: June, 08
- Heavy duty truck efficiency: Dec. 08
- Motor vehicle DIY refrigerant cans: Jan. 09
- SB 375 Regional Targets Advisory Committee: Jan. 09
- GHG reduction in semiconductors: Feb. 09
- Sulfur hexafluoride emission reductions: Feb. 09

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Scoping Plan Measures Intersect with Local Government

- Energy Efficiency
- Renewable Energy
- Green Buildings
- Recycling and Waste
- Water
- Transportation
- Vehicle Efficiency
- High GWP Gases
- Sustainable Forests
- Community Design

(See Handout)

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Transportation is #1 Contributor Cars, Trucks, Goods Movement and Fuel

- Light-duty Vehicle Greenhouse Gas Reductions (Pavley I and Pavley II)
- Low Carbon Fuel Standard
- Efficiency Measures for Cars
- Aerodynamic Improvements for Big-rig Trucks
- Hybridization for Urban and Short-haul Trucks
- Implement Adopted Goods Movement Strategies and Improve Efficiency
- High Speed Rail
- Transportation and Land Use Planning

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GHG Reduction Measures Transportation-Related Emissions

$$\text{Transp. GHG} = \left(\frac{\text{GHG}}{\text{Mile}} \right), \left(\frac{\text{GHG}}{\text{Gallon}} \right), \left(\text{VMT} \right)$$



↑ AB 1493 Regulation ↑ Low-Carbon Fuel Standard ↑ Transp. & Land Use Strategies

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Energy is #2 Contributor Electricity and Natural Gas

- Cutting Energy Use Saves Money and Reduces GHG Emissions
- Plan Includes Aggressive Energy Efficiency Goals and Increased Renewable Energy
- Meeting the Goals in the Scoping Plan Requires
 - Expanded Utility-based Energy Efficiency Programs
 - More Stringent Building and Appliance Standards
 - Innovative Strategies that Go Beyond Traditional Approaches
- Plan Relies on Expanded Efforts By the CEC and CPUC

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Green Building Strategy Solution for Cross-Sector GHG Reductions

- Green Building Achieves GHG Emission Reductions from Multiple Sectors
 - Transportation, Energy, Waste, and Water Sectors
- Offers Increased Public Health Benefits
 - Due to Improved Indoor Air Quality
- Scoping Plan Goals to Reduce GHG Emissions
 - New Construction
 - Green Building Standards Code
 - Beyond Code: Local Government Goals to Exceed Standards
 - Existing Building Retrofits
- Represents 15% of the AB 32 2020 Target

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Recycling and Waste Turning Waste Into Resources

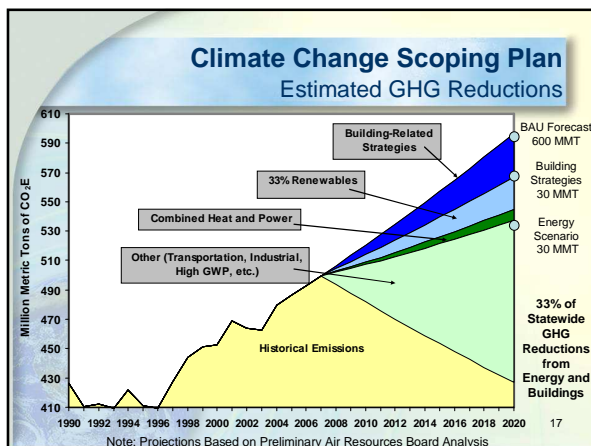
- Reduce Methane Emissions at Landfills
 - Landfill Methane Control
 - Increase the Efficiency of Landfill Methane Capture
- Increase Waste Diversion, Composting, and Commercial Recycling
 - Commercial Recycling
 - Increase Production and Markets for Compost
 - Anaerobic Digestion
 - Extended Producer Responsibility
 - Environmentally Preferable Purchasing
- Move Toward Zero Waste

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Water Recommendation Indirectly Reduces Energy Usage

- Reduce Energy Requirements with Providing Reliable Water
 - Continue Water Use Efficiency Programs
 - Increase Water Recycling
 - Improve Water System Energy Efficiency
- Reduce Non-Renewable Electricity with Conveying and Treating Water
 - Reuse Urban Runoff
 - Increase Renewable Energy Production
- Provide Sustainable Funding
 - Public Goods Charge

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Overall Benefits AB 32 Implementation

- Clean Energy Future
- Good for the Environment, Economy, and Public Health
- Saves Money, Creates Jobs, Builds Green Technology
- Doing Nothing has High Costs
- California Leadership Sets Stage for National Plan

Source: Findings from ARB Economic Analysis and Public Health Analysis Supplements to Climate Change Scoping Plan.

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Local Government Leadership Climate Action Planning

- Local Governments are Leaders in Developing Climate Policy
- Influence and Exclusive Authority Over Significant Emission Sources
 - Implementing Local Programs
 - Passing Ordinances, Standards, and Codes
- Establishing Local GHG Targets
- Scoping Plan Encourages Consistency with State's Goal

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Role of Local Government Achieving the Goals of AB 32

- Meeting AB 32 goals means emissions in every community being reduced an average of 15% from today's levels by 2020.
 - State, regional, local, and individual effort
 - Transportation, energy, waste, and water
 - Local Climate Action Plans
 - Keep track of emissions
 - Take actions to reduce emissions

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Shared Challenge Reducing GHG Emissions

	State	Regional/Local	Individual
Transportation	<ul style="list-style-type: none"> • Vehicle technology regulations • Low-carbon fuel standard • Set regional targets 	<ul style="list-style-type: none"> • Blueprint planning efforts • Local land use and transportation decisions • Clean fleets 	<ul style="list-style-type: none"> • Reducing 1 vehicle round trip per week would reduce trip-making by 5%
Energy	<ul style="list-style-type: none"> • Building & appliance standards • 33% renewables portfolio • Million solar roofs program 	<ul style="list-style-type: none"> • Influence carbon content of municipal utility operation • Local building energy savings 	<ul style="list-style-type: none"> • Purchasing and conservation decisions
Waste	<ul style="list-style-type: none"> • Landfill methane control • Waste Management Board recycling efforts 	<ul style="list-style-type: none"> • Collection system adjustments • Waste reduction programs 	<ul style="list-style-type: none"> • Reducing, reusing, recycling
Water	<ul style="list-style-type: none"> • Develop statewide plan to reduce per capita water use 20% 	<ul style="list-style-type: none"> • Reduce municipal operation use • Community-wide conservation programs 	<ul style="list-style-type: none"> • Save water in the home and in the yard

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Local Government Toolkit Main Objectives

- One-stop-Shop
- Guidance, Tools, and Resources
- Improve Access to Technical Information
- Raise Awareness of Strategies and Benefits
- Reduce GHG Emissions and Save Money
- Draft Available at the Following Website:
 - <http://Beta.CoolCalifornia.org>
- Please Stay Tuned for Afternoon Presentation

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Toolkit Components Local Government Toolkit

- Climate Action Planning
- Cost-Saving Strategies
- Financial Resources
- California Case Studies
- Climate Calculators
- Decision Support Tool
- Peer-Networking Online Discussion Forum
- Award Program



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Cost-Saving Strategies Toolkit Component

- Energy Efficiency and Conservation
- Green Transportation
- Renewable Energy
- Water Efficiency
- Waste Reduction and Recycling
- Environmentally Preferable Purchasing
- Green Building
- Promoting Individual and Community Action

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Financial Resources Toolkit Component

- Organized by Cost-Saving Strategy
- Up-to-date Summary of Available Resources
 - Grants
 - Rebate Programs
 - Federal Tax Incentives
 - Loans
 - Third Party Financing
- Links to More Information



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California Case Studies Toolkit Component

- 2-Page Overview with Pictures and Quotes
- Highlight GHG Reductions Achieved
- Climate Action Plan Summary
- Initial Investment/Annual Cost Savings
- Lessons Learned
- Contact Information
- Video Testimonials



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Climate Calculators Toolkit Component

- Assist Local Governments with Calculating GHG Emissions Inventory
- Showcase Calculators Consistent with Local Government Operations Protocol
- Feature Comprehensive Calculators
 - Clean Air and Climate Protection Software
 - ICLEI (Local Governments for Sustainability)
 - Climate Registry Information System (CRIS)
 - The Climate Registry
- Highlight Sector-Specific GHG Calculators
 - GreenPoint Rated Climate Calculator
 - Build It Green

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Decision Support Tool Toolkit Component

- Climate and Air Pollution Planning Assistant (CAPPA)
- Under Development by ICLEI
- Primary Decision Support Tool for Local Governments
- Tool Provides Assistance to Develop Customized Plans
- Comprehensive Library of Emission Reduction Strategies
- Estimates GHG Emission Reductions, Local Air Pollution Benefits, and Cost Savings

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Recognition Program Toolkit Component

- Partnering with the ILG California Climate Action Network (CCAN)
- Climate Leadership Recognition Program
- Recognize Achievements of Cities and Counties
- Based on Measurable GHG and Energy Reductions



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Tentative Timeline Local Government Toolkit

Toolkit Content Development	Ongoing
ARB Internal Review of Toolkit Content	Ongoing
Kick-Off Public Workshop	March 9, 2008
Release Beta Toolkit for Public Comment	March 9, 2009
Advisory Group Meeting	March 25, 2008
Public Workshops (Nor Cal and So Cal)	Early April, 2009
Advisory Group Meeting	Mid-April, 2009
Finalize Toolkit Content	May, 2009
Board Hearing	May 28-29, 2009

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