

## Local Government Training Home Performance Energy Audit Program

# California's Climate Policy: Local Government and Greening Existing Homes

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California Air Resources Board  
California Environmental Protection Agency

# California's GHG Reduction Targets

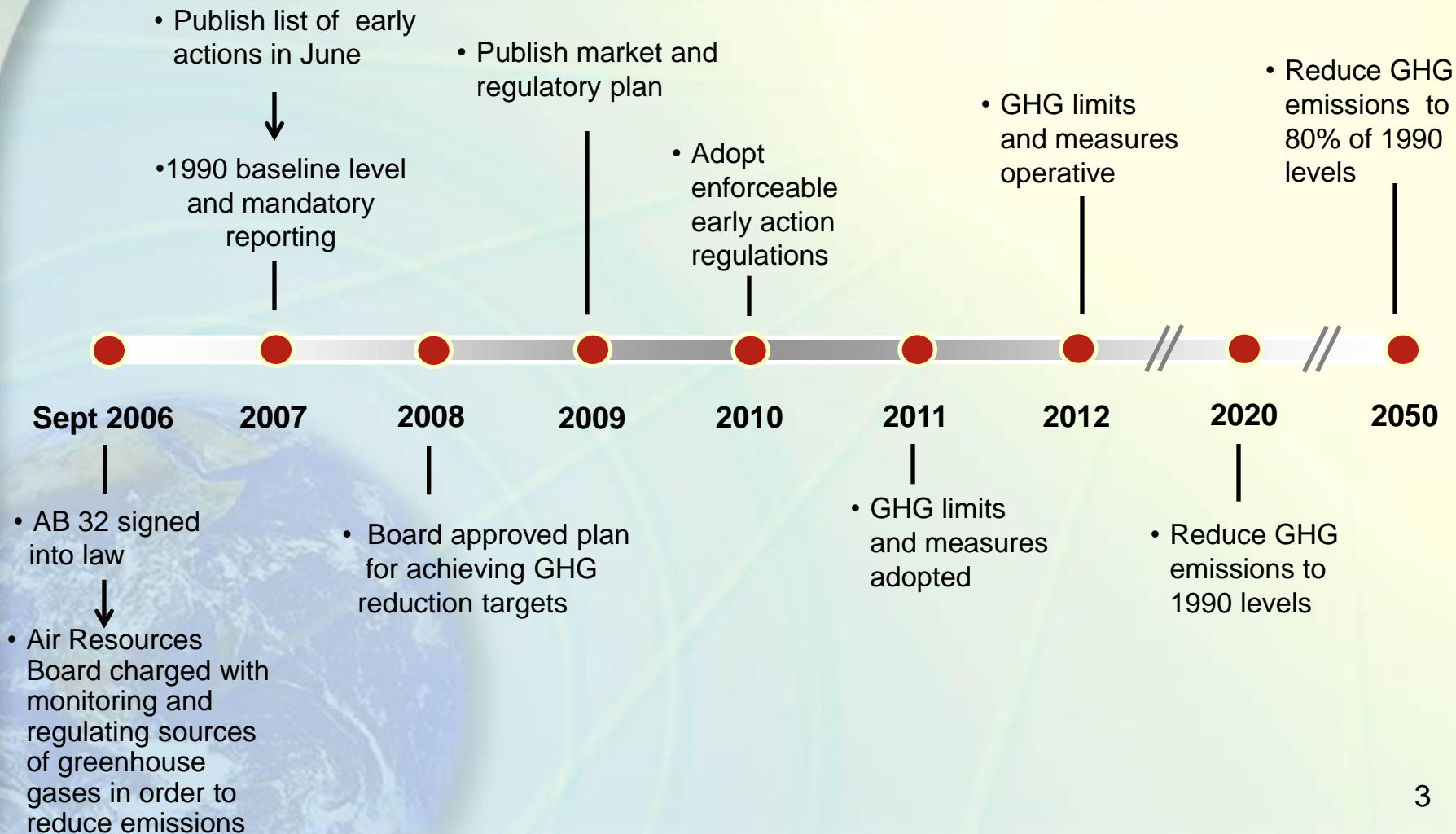
June 2005



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

# Overview of AB 32

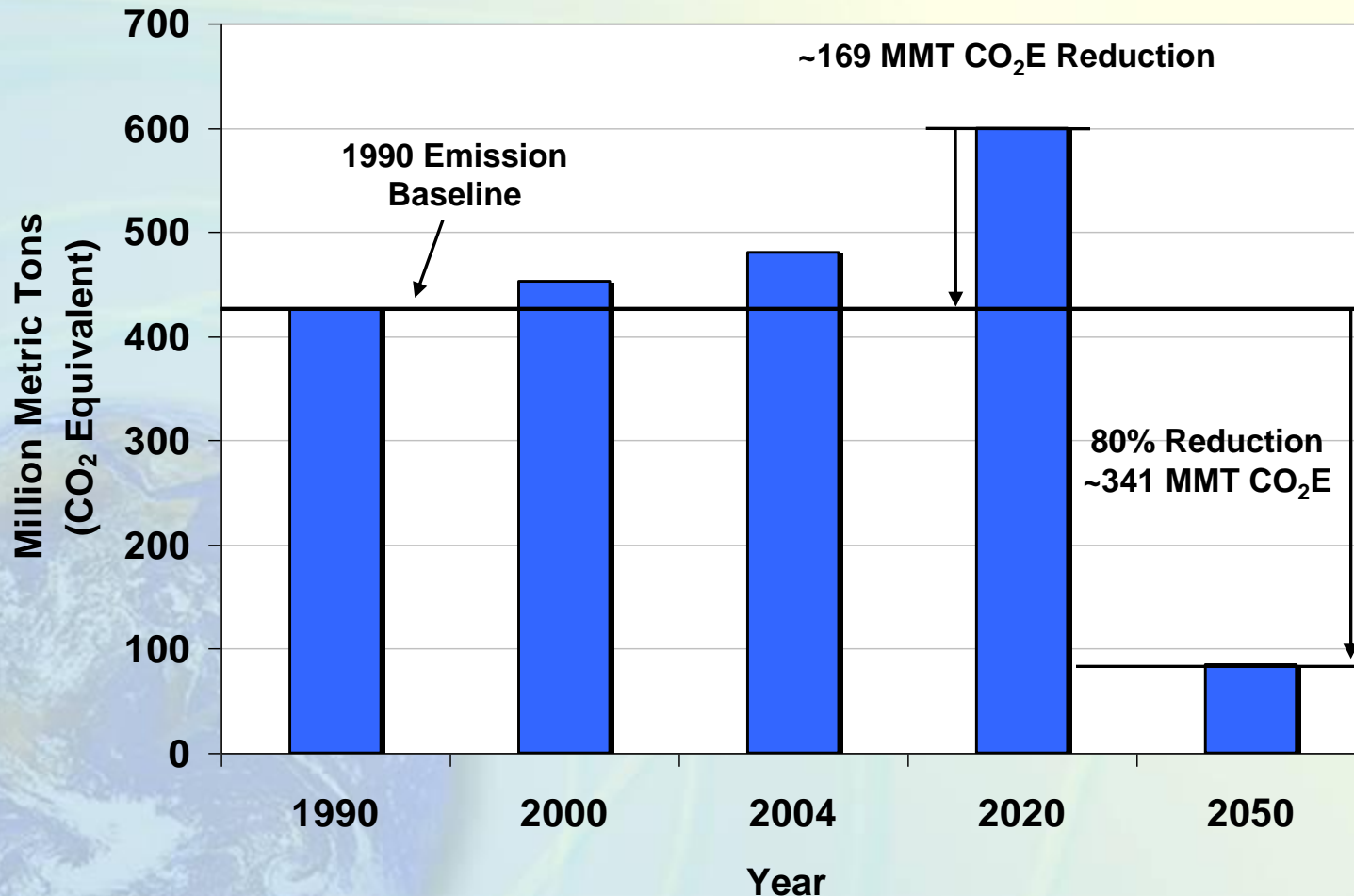
## California Global Warming Solutions Act



# Magnitude of the Challenge

## California's GHG Reduction Targets

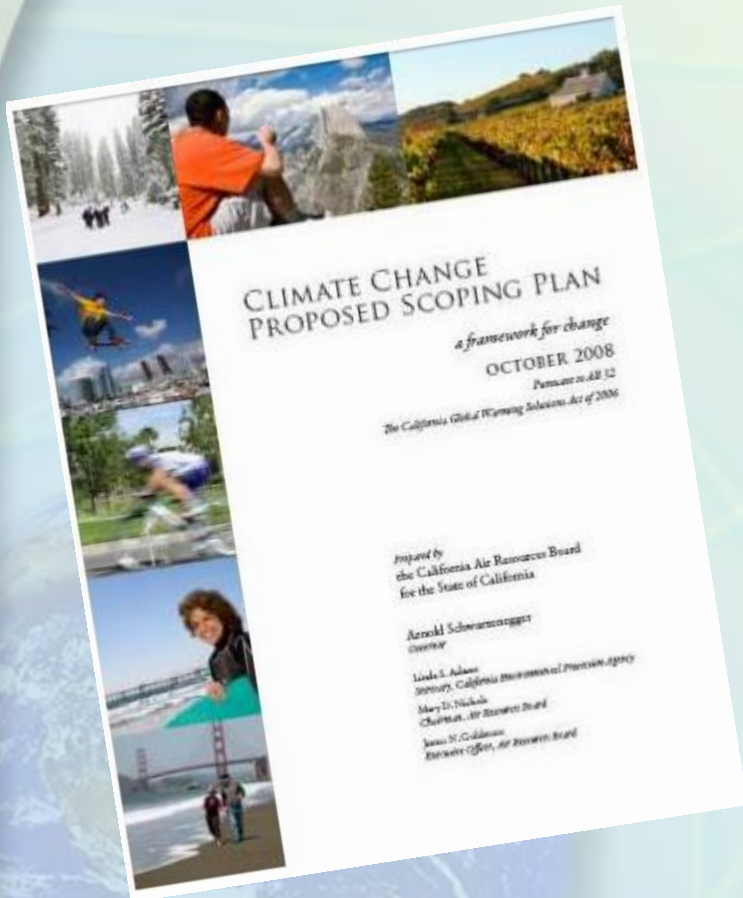
ARB Emissions Inventory



Source: California Air Resources Board

# Climate Change Scoping Plan

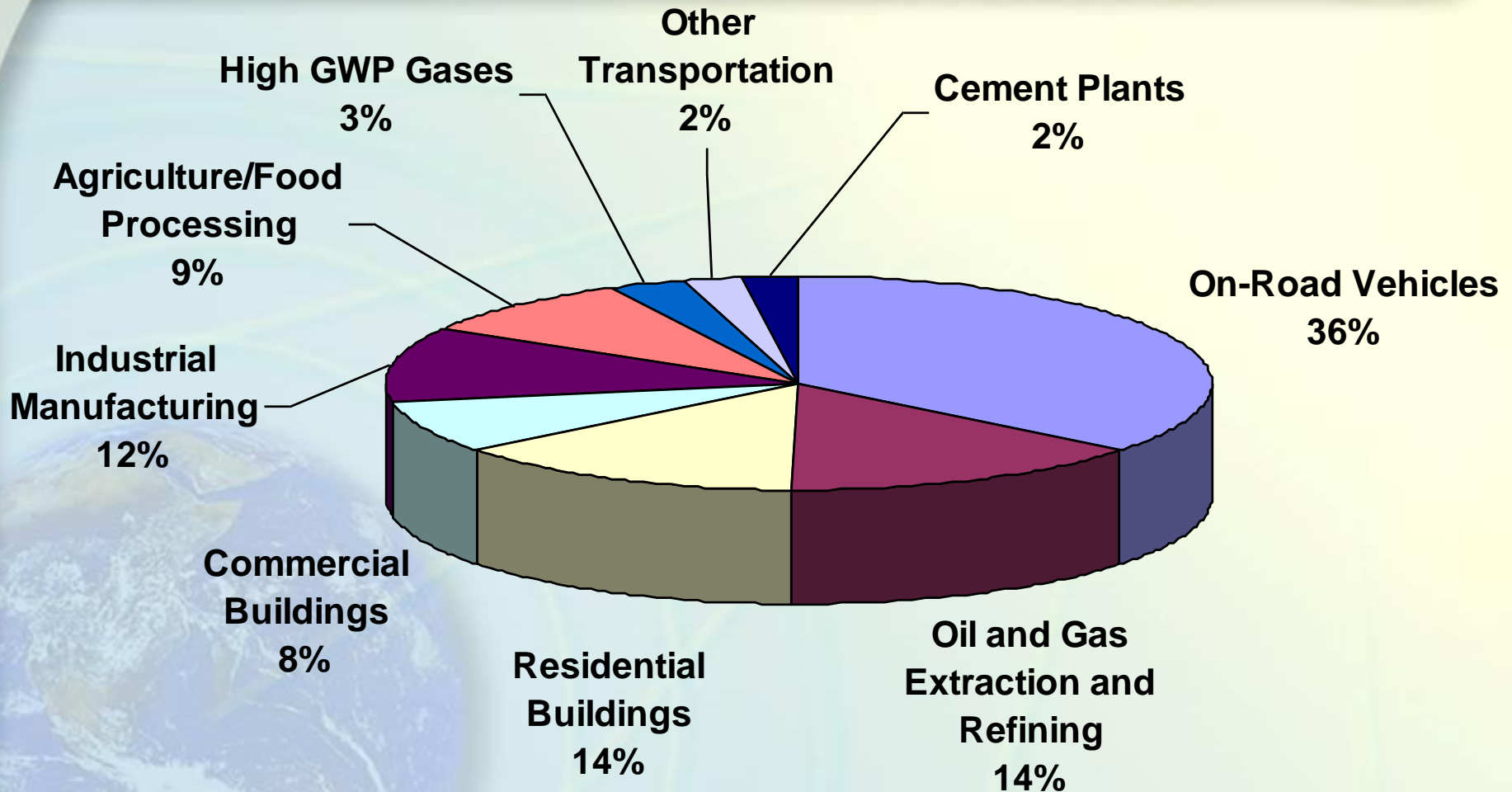
## A Framework for Change



- 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

## A Demand-Side View (2002-2004 Average)



Source: Climate Change Scoping Plan, Figure 2

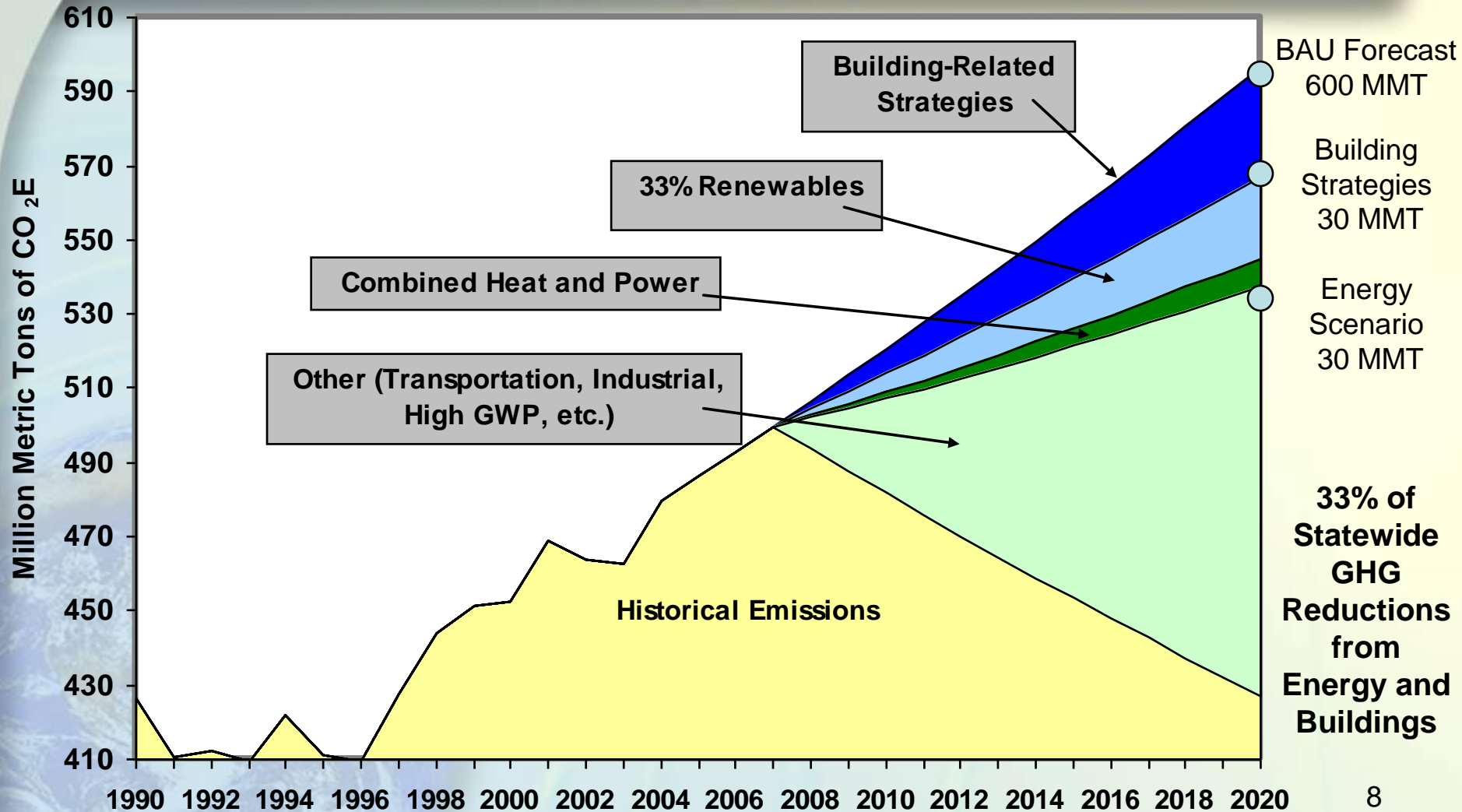
# Climate Change Scoping Plan

## 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

# Climate Change Scoping Plan

## Estimated GHG Reductions



Note: Projections Based on Preliminary Air Resources Board Analysis

# 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

# 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
  - Green Building Standards Code
  - Beyond Code: City/County Goals to Exceed Standards
  - Existing Building Retrofits
- Represents 15% of the AB 32 2020 Target

# Green Building

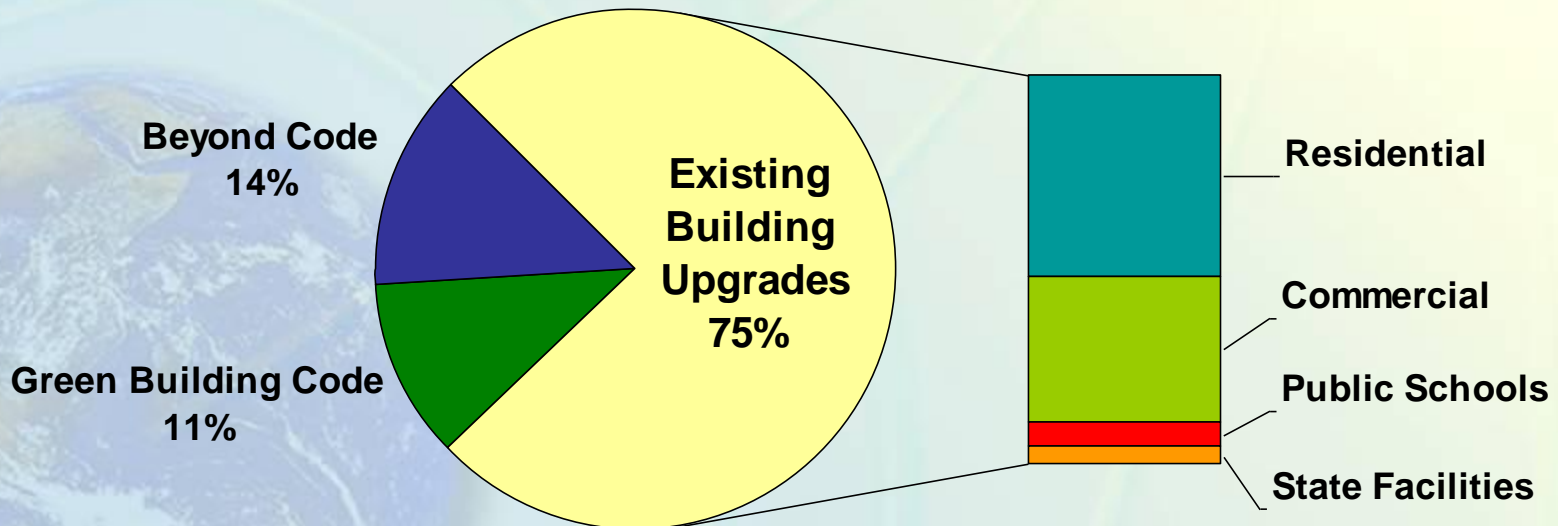
## GHG Reduction Potential (26 MMT CO<sub>2</sub>e)

Green Building Strategies	New Construction		Existing Buildings	Totals
	Green Building Code	Beyond Code	Retrofits	
State	0.02	0.09	0.9	1.0
Public Schools	0.08	0.1	1.2	1.4
Residential	1.1	0.4	10.4	11.9
Commercial	1.7	3.0	7.5	12.2
<b>Totals</b>	<b>2.9</b>	<b>3.6</b>	<b>20</b>	<b>26*</b>

*\* To avoid double counting, these GHG reductions are not attributed to green buildings. They are counted under energy efficiency in the Draft Scoping Plan.*

# Green Building GHG Emission Reduction Potential

- Over 13 million Existing Homes in California
- 70% of Housing Predates Energy Standards
- Many Have Not Undergone Major Remodels
- Existing Homes Offer #1 GHG Reduction Potential



# Existing Home Retrofits

## Green Building Strategy

- Environmental Performance Testing
  - Benchmark energy and water usage
  - Carbon footprint
- Whole-Building Retrofits
- Zero Net Energy
- 3<sup>rd</sup>-Party Certification for Existing Homes
  - Home Energy Rating System (HERS II)
  - GreenPoint Rated
- Innovative Financing



# Local Government Toolkit

“One-Stop Shop” to save money & facilitate **voluntary** GHG reductions

The screenshot displays the CoolCalifornia.org website interface. At the top, the logo 'CoolCalifornia.org' is accompanied by the tagline 'GOVERNMENT • UNIVERSITY • NGO PARTNERSHIP'. Navigation links include 'HOME', 'INDIVIDUALS', 'SMALL BUSINESS', 'LOCAL GOVERNMENT', 'YOUTH', 'COMMUNITY ORGANIZATIONS', 'SCHOOLS', and 'ABOUT US'. A search bar with a 'GO' button and a link to 'Advanced Search' is also present.

The main content area is titled 'LOCAL GOVERNMENT' and features a sub-header 'Local Government Toolkit'. Below this, a blue box contains the text: 'A "one-stop-shop" of guidance and resources to help local governments reduce greenhouse gas emissions and save money.' To the right of this box are 'EMAIL THIS' and 'SHARE THIS' icons.

A central image shows a city skyline with modern buildings. Below the image, the text reads: 'Cities and counties are essential partners contributing significantly to California's efforts to reduce greenhouse gas (GHG) emissions. Many cities and counties are already taking action to be part of the solution to address climate change.'

At the bottom of the main content area, it states: 'The purpose of this Local Government Toolkit is to identify cost saving actions, financial resources, and case studies to assist local governments with achieving GHG emission reductions.'

On the left side of the page, there is a sidebar with a 'Local Government' section containing links to 'Climate Action Planning', 'How to Save Money', 'Financial Resources', 'Case Studies', 'Climate Calculators', and 'Submit Comments'. Below this is a 'Join our mailing list' section with a text input field, a 'Subscribe' button, and an 'Unsubscribe' button.

On the right side, there is a 'Highlights' section with a list of topics: 'What is the Local Government Toolkit?', 'Why are Local Governments Essential Partners?', 'How Can Local Governments Contribute to the Solution?', and 'What is AB32 or the Global Warming Solutions Act?'.

# Toolkit Components

## Local Government Toolkit

- Climate Action Planning
  - Tips, Templates, & Sample Measures
- How to Save Money
  - Save Energy
  - Drive Less & Drive Clean
  - Use Renewable Energy
  - Save Water
  - Recycle and Cut Waste
  - Buy Green
  - Build Green
- Financial Resources
- Climate Calculators
- California Success Stories



# Role of Local Government

## Achieving the Goals of AB 32

- Local Governments are Essential Partners
- Influence and Exclusive Authority Over Significant Emission Sources
  - Implementing Local Programs
  - Passing Ordinances, Standards, and Codes
- Adopt Targets Consistent with the State's Goal to Reduce GHG Emissions by 15% Below Today's Levels by 2020

# Existing Home Retrofits

## Suggestions for Local Government

- Implement a Home Retrofit Program
- Partner with Utility Programs
- Require Environmental Performance Testing for Existing Home Retrofits
- Encourage or Mandate Comprehensive Upgrades, Remodels, and Renovation Projects
  - Energy efficiency, water, and green building
- Promote 3<sup>rd</sup>-Party Certification

# Existing Home Retrofits

## Suggestions for Local Government (Cont.)

- Offer Non-Financial Incentives
  - Technical Assistance
  - Priority Plan Check
  - Expedited Permitting
- Utilize Energy Efficiency and Conservation Block Grant Funds to Support Home Retrofits
- Establish/Expand Financial Incentives
  - Implement an AB 811 Tax-Bill Financing Program
  - City-FIRST and Green Energy Loans
  - Coordinate at the Regional Level

# Local Government Toolkit

[www.CoolCalifornia.org](http://www.CoolCalifornia.org)

CoolCalifornia.org

Small Business Toolkit

Local Government Toolkit

Individual Tools

The screenshot shows the CoolCalifornia.org website homepage. At the top, the logo "CoolCalifornia.org" is displayed with the tagline "GOVERNMENT • UNIVERSITY • NGO PARTNERSHIP". Navigation links include HOME, INDIVIDUALS, SMALL BUSINESS, LOCAL GOVERNMENT, YOUTH, COMMUNITY ORGANIZATIONS, SCHOOLS, and ABOUT US. A search bar is located in the top right corner. The main content area features a large banner with the headline "TAKE ACTION TO KEEP THE PLANET COOL" and a photo of a person working on solar panels. Below the banner, there is a "Most Popular" section with several tool cards: "Join a Network", "Reduce Your Climate Impact", "Save Money & the Planet", "Money to Get You Started", "California Success Stories", and "Climate Awards". A "Cool Tip" section provides advice on "Eco-Driving". At the bottom, there are two smaller toolkits: "Small Business Toolkit" and "Local Government Toolkit". A "Sign In" section is also present, along with a "Join our mailing list" link.

# Contact Information

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**Thank you!**

