

# Climate Change & Transportation in California



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LEADERSHIP & THE ENVIRONMENT

Newsweek

April 16, 2007 \$4.00

newsweek.com



ARNOLD'S CRUSADE  
GREEN CITIES  
SCIENCE AND CO<sub>2</sub>  
CHINA'S WATER CRISIS  
A GLOBAL CARBON TAX?  
GENERATION GREEN  
BIG FIXES, & SMALL ONES

# Save the Planet— Or Else

PHOTOGRAPH BY NICKI FARMY

Gov. Arnold Schwarzenegger

# Key Overall Efforts



*(June 1, 2005)*



**Strategic Growth Plan:**  
**Investing in California**

*(January 5, 2006)*

# Executive Order #S-3-05

- Signed on June 1, 2005
- Established greenhouse gas targets:
  - By 2010, reduce to 2000 emission levels
  - By 2020, reduce to 1990 emission levels
  - By 2050, reduce to 80 percent below 1990 levels





# Climate Action Team

- **California Environmental Protection Agency (Cal/EPA),**
- **Business Transportation and Housing Agency (BTH),**
- **California Department of Food and Agriculture (CDFA),**
- **State and Consumer Services Agency (SCSA),**
- **California Air Resources Board (CARB),**
- **California Department of Forestry and Fire Protection (CalFire),**
- **California Energy Commission (CEC),**
- **Department of General Services (DGS),**
- **Department of Water Resources (DWR),**
- **Integrated Waste Management Board (IWMB)**
- **California Public Utilities Commission (CPUC)**

# California Global Warming Solutions Act (AB 32)

- Passed in Sept. 2006, directed CARB to:
  - Establish GHG emissions cap for 2020
  - Create list of early action measures to be implemented by 2010
    - Appliance efficiency, lighting efficiency, building standards, cement mix, and many more

[http://www.climatechange.ca.gov/climate\\_action\\_team/reports/2007-04-20\\_CAT\\_REPORT.PDF](http://www.climatechange.ca.gov/climate_action_team/reports/2007-04-20_CAT_REPORT.PDF)

# Strategic Growth Plan: Transportation



- Reduce congestion
- Improve quality of life for Californians
- Support a globally-competitive economy and promote prosperity

# Statewide Sources

Welcome to *California*

**California Climate Change Portal**

**Home** Background Policy & Program Western Climate Initiative Documents Glossary Links Research Meetings & Events Funding

State of California Home  
Calif. Environmental Protection Agency  
Calif. Air Resources Board  
Calif. Energy Commission

CALIFORNIA  
**Climate ACTION TEAM**

Climate Change Research

**climate CHANGE**  
Global Warming Solutions Act Implementation

GREEN HOUSE GAS INVENTORY

**ANNOUNCEMENTS**

International Carbon Action Partnership  
FAQ and Declaration  
10/29/07

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

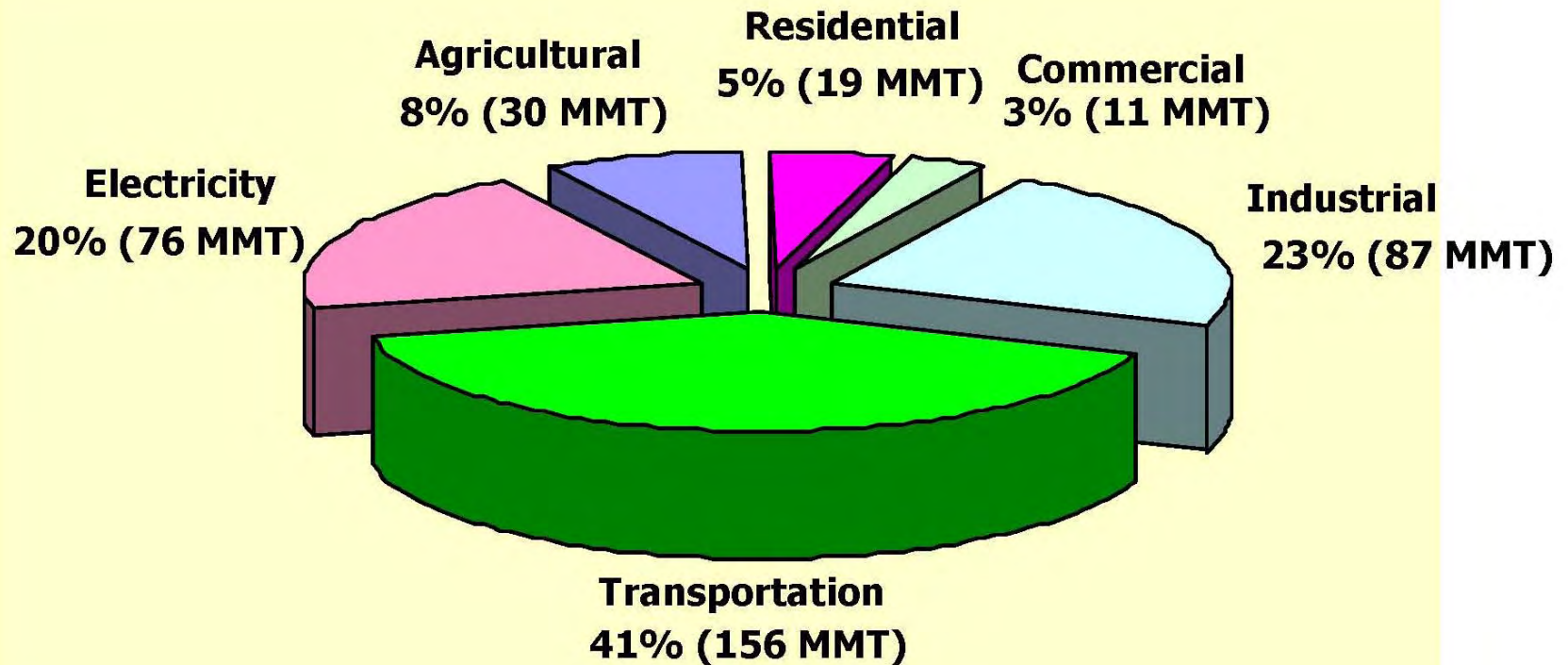


## **Climate Action Program at Caltrans**

<http://www.dot.ca.gov/docs/ClimateReport.pdf>

# California Global Warming Emissions by Sector (2002)

Source: California Energy Commission, "Inventory of California Greenhouse Gas Emissions and Sinks, 1990 to 2002 Update"



# Reducing GHG Emissions from Transportation

## Transportation System Efficiency

### Strategic Growth Plan

- Congestion Relief
- Operational Improvements/ITS
- Alternative Modes
- Demand Management
- Urban Design



## Energy Efficiency

- Alternative Fuels (H<sub>2</sub>, Bio-fuel, Low Carbon)
- Vehicle Technology (Vehicle Fuel Efficiency Advanced ICE)



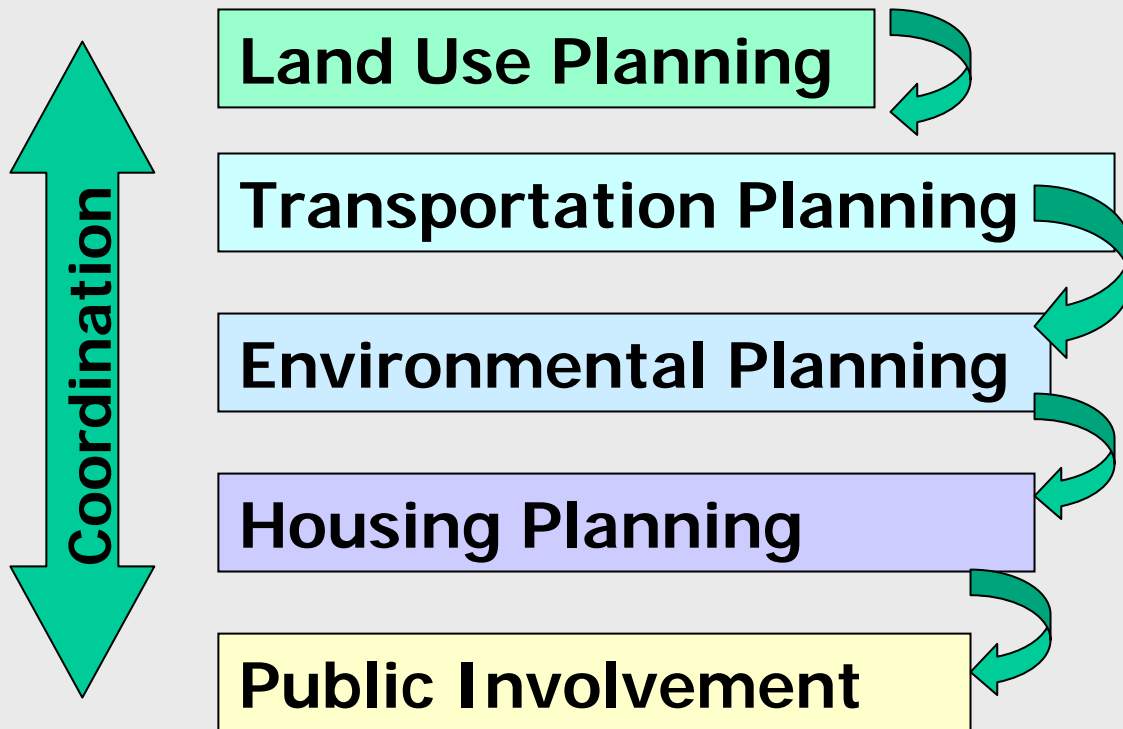
## Resource Conservation

- Non-Vehicular Energy Conservation
- Facilities, Buildings, & Equipment
- Cement
- Landscaping



# Planning Efforts Linked to Transportation Efficiency

## Blueprint Planning



*Voluntary, grant program*

*Comprehensive, collaborative, and integrated*

# Planning Efforts Linked to Transportation Efficiency

- **Blueprint Planning (cont.)**
  - **Identify in Regional Blueprint Plan:**
    - **Most effective and efficient transportation system**
    - **Preferred land use scenario**
      - **Integration of transportation, housing, land use, environmental resources, & other infrastructure**



Source: [www.scag.ca.gov](http://www.scag.ca.gov)

# Planning Efforts Linked to Climate Change



- **Regional Transportation Plan Guidelines & Climate Change**
  - **Statewide, interdisciplinary, multi-agency/organization team effort underway**
    - **No final product yet, exploring options that would require greenhouse gas analyses and would parallel “conformity” approach**
    - **Also looking at linking to blueprint planning efforts**

# Climate Change in Caltrans Environmental Documents

## **Laying down law on global warming**

**Brown uses 1970 statute to insist projects assess climate-change impacts.**

By Chris Bowman - Bee Staff Writer  
*Published 12:00 am PDT Friday, July 27, 2007*

## **Budget battle gets greener**

**Sierra Club official joins Perata to rip GOP senators' stance on environment law.**

By Judy Lin - Bee Capitol Bureau  
Published 12:00 am PDT Thursday, August 9, 2007  
Story appeared in MAIN NEWS section, Page A4

# Climate Change in Caltrans Environmental Documents

- **What is the proper scale for analysis—is this a planning issue or a project-level issue or both?**



# Climate Change in Caltrans Environmental Documents

- Addressing as cumulative impact  
([http://www.dot.ca.gov/ser/downloads/templates/eir\\_eis.doc#climate](http://www.dot.ca.gov/ser/downloads/templates/eir_eis.doc#climate))
- Taking the analysis as far as we can—what do the CO<sub>2</sub> numbers mean?



# CEQA & Climate Change: New and Upcoming Efforts

CEQAmap database of  
environmental documents that  
address GHGs



[http://www.ceqamap.com/search\\_ghg.php?do\\_search=1&agency\\_id=&search\\_str=%22ceqa-ghg%22&search\\_year=&search\\_county=0&agency\\_name=](http://www.ceqamap.com/search_ghg.php?do_search=1&agency_id=&search_str=%22ceqa-ghg%22&search_year=&search_county=0&agency_name=)

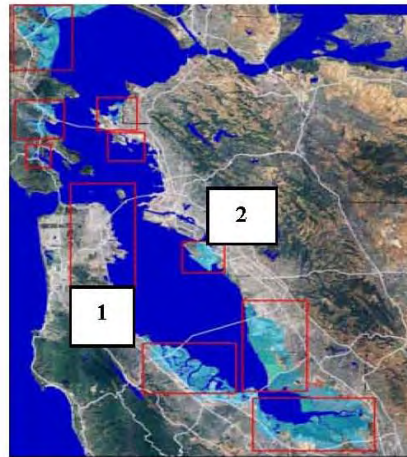
# CEQA & Climate Change: New and Upcoming Efforts

- California Environmental Quality Act (CEQA) guidelines “for the mitigation of GHG emissions or the effects of GHG” by July 1, 2009

**Greenhouse Gas Guidelines May Get Political From  
Outset**

24 September 2007 - 11:14am | Author: Paul Shigley

# Adaptation (Impact of Climate Change on Transportation)



San Francisco - Oakland Bay Area – One meter sea level rise scenario



Photo of Land Slide, February 2007 - Humboldt County, CA, State Highway 96

**Thank you!**

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