

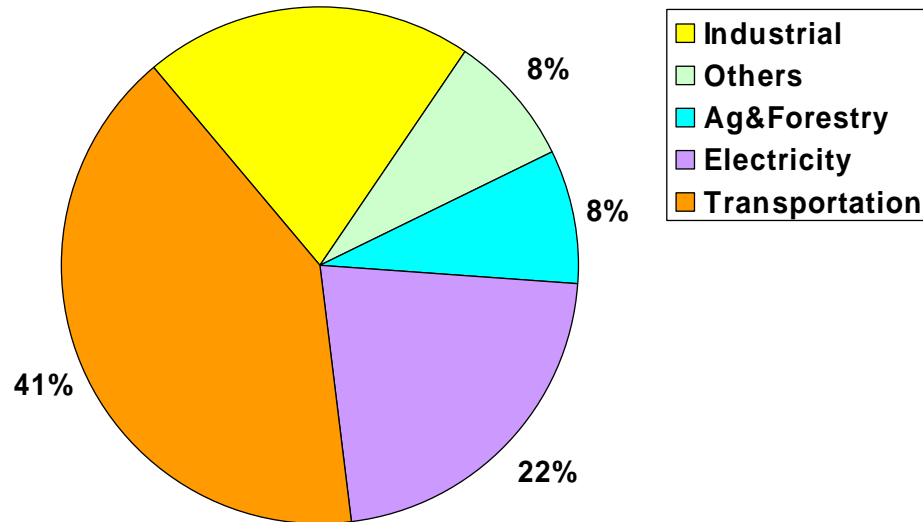


# Land Use and Climate Change Response in California

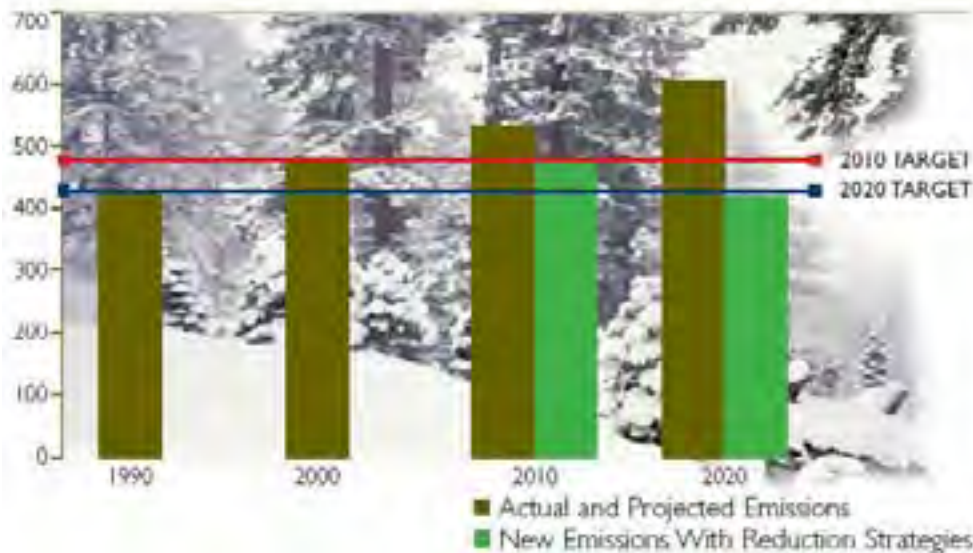
Presented at  
University of San Diego  
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Deputy Director for R&D  
California Energy Commission

# California Responds to Global Warming 2000 - 2007



California Carbon Dioxide Emissions by Energy Sectors, 2004  
~400 million metric tons carbon dioxide

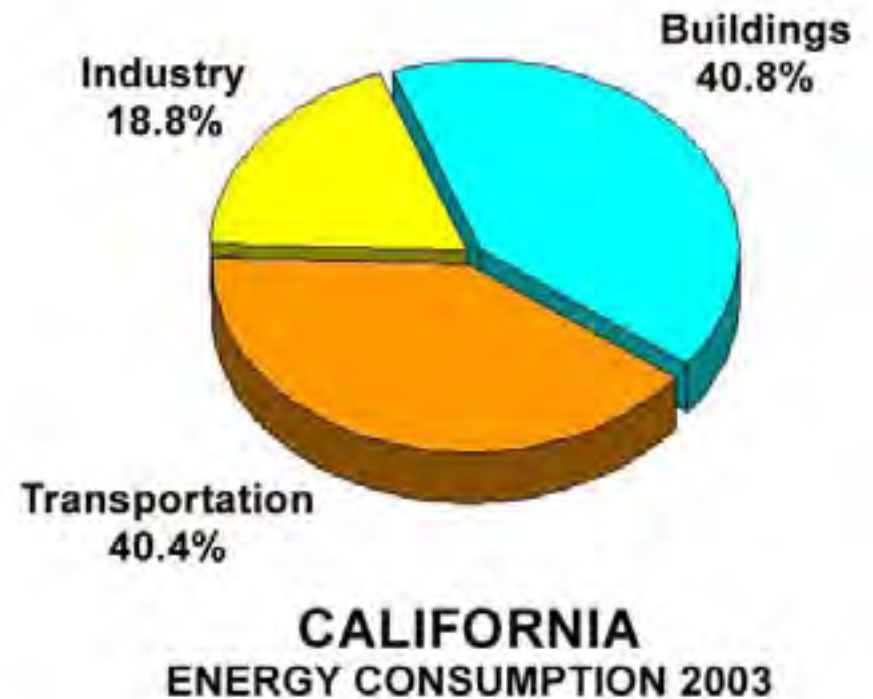
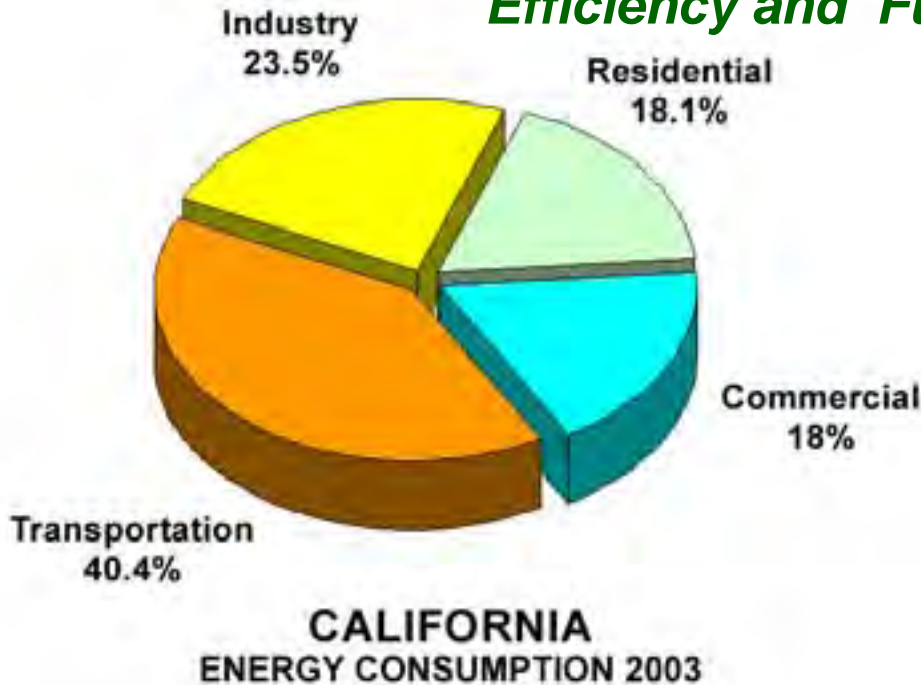


- In 2000, the California Greenhouse Gas Registry was established
- In 2002 AB1493 (Pavley) mandates 30% reduction GHG emissions in new light duty vehicles by 2016
- In 2005, AB 1007 requires plan to replace gasoline use with low carbon alternatives.
- AB 32 – Global Warming Solutions Act of 2006; aggressive goals for 2020
- SB 1368 – GHG Emissions standards for IOUs and POUs
- AB 2021 – Energy Efficiency for POUs
- AB 2160 – Green Building Acquisition Financing for State Facilities
- SB107 – Accelerated RPS Goals – 20% by 2010
- SB1 – Renewables Goals for New and Existing Residential and Commercial Structures
- AB 2778 – Self-Generation Incentive Program for Fuel Cells and Wind
- SB 1250 – PIER and Renewables Incentive Programs Reauthorized
- In 2007, Governor mandates development of Low Carbon Fuel Standard.
- AB 118 (Nuñez) establishes incentives for Development and Deployment of new technologies for alternative fuels and vehicles

# Where is California's Energy Used



*Transportation and Buildings Offer Equal Targets for Efficiency and Fuel Displacement*

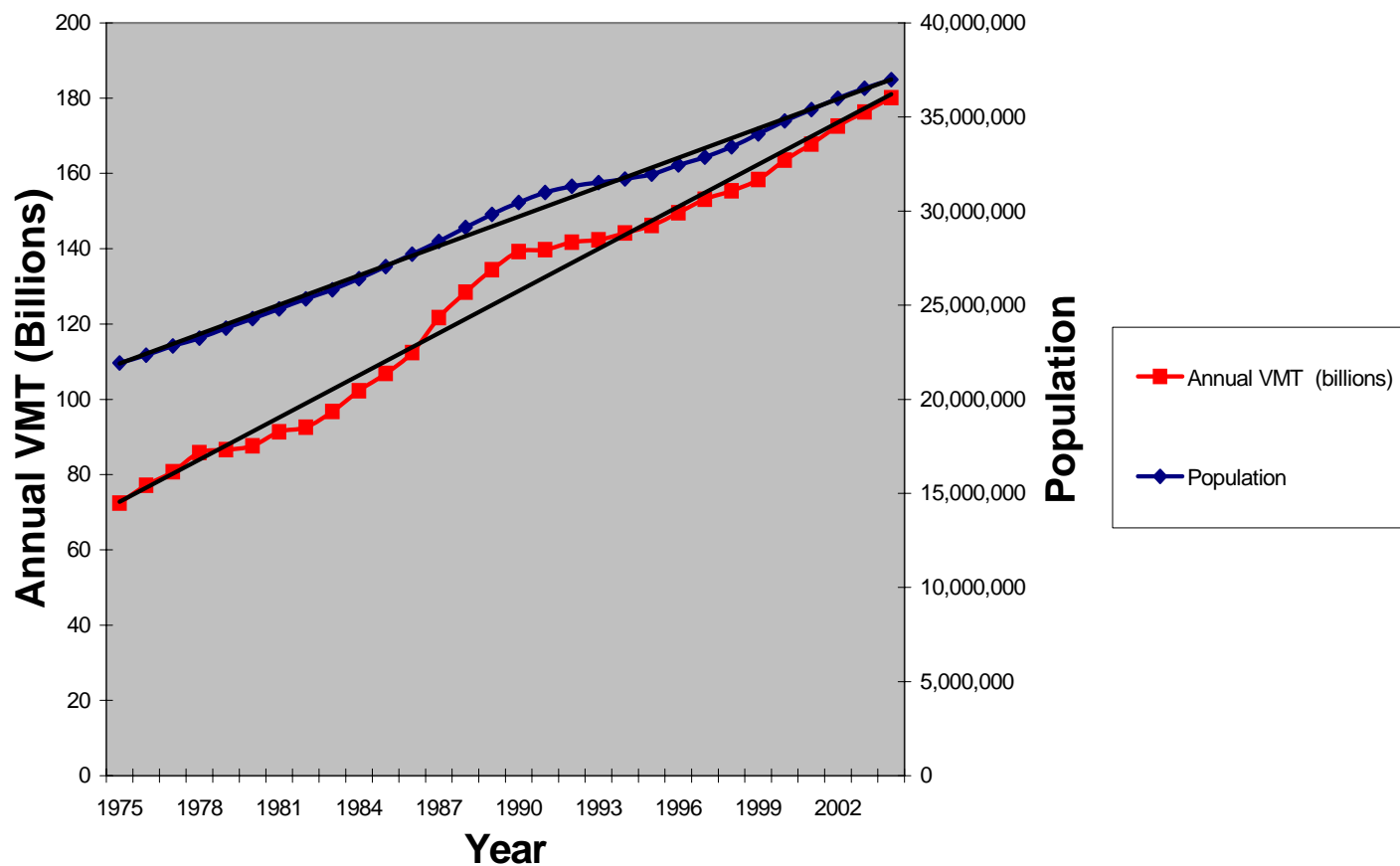


# Land Use ↔ Energy Use



- Historically Driven by Transportation and Vehicle Miles Traveled (VMT)

## VMT and Population in CA 1975-2004



# Land Use ↔ Energy Use



- Historically, Land Use Planning Has Been Driven by Transportation and Vehicle Miles Traveled (VMT)
- Clean Energy and Climate Change Add New Opportunities
  - Integrated Efficiency and Renewables, New Solar Homes Partnership
  - Siting New Developments for Renewables
  - Distributed Electricity Generation
  - Water Distribution, End Use Efficiency, and Treatment
  - Existing Buildings Retrofitting
- New Partners Needed
  - Municipal
  - Regional
  - Utilities
- Greenhouse Gas Inventories Needed
- Climate Action Plan as a New Element

