California's Leadership: Climate Change Initiative

Alan C. Lloyd, Ph.D. Secretary for Environmental Protection

California Action Plan Panel December 6, 2005

Climate Change Leadership

"I say the debate is over. We know the science. We see the threat. And we know the time for action is now."

> -- Governor Schwarzenegger June 1, 2005 World Environment Day



Why California Matters

World's Largest GHG Emitters

| | | 2000 Emissions (Mt CO2) | Per Capita Emissions |
|-----|------------|----------------------------|-------------------------|
| 1. | USA | 5,661 | 19 |
| 2. | China | 2,795 | 02 |
| 3. | Russia | 1,437 | 10 |
| 4. | Japan | 1,186 | 09 |
| 5. | India | 1,073 | 01 |
| 6. | Germany | | 10 |
| 7. | UK | 569 | 09 |
| 8. | Canada | 437 | 13 |
| 9. | Italy | 429 | 07 |
| 10. | South Kore | a428 | 09 |
| 11. | Mexico | 425 | 04 |
| 12. | California | | 12 ◄ |



Source: Oak Ridge National Laboratory, California Energy Commission

California Pledges to:

Lead the Nation

- Motor Vehicle Standards
- Energy Efficiency Standards
- Renewable Portfolio Standard (RPS)

Grow the ECONOMY While Cutting Emissions - \$5 Billion Consumer Savings Annually by 2020 (vehicle regulations)

Encourage Investment in GHG Technology

- World Market Potential: \$180 Billion Annually
- Add 53,000 More Jobs in California by 2020 (vehicle regulations)

Cal Companies Are Taking Action California Climate Action Registry - 55 companies are voluntarily reporting their greenhouse gas emissions. Silicon Valley Companies -- Pledged to Reduce Emissions to 20% Below 1990 levels by 2010. Hewlett-Packard Life Span Oracle Calpine Lockheed Pacific Gas & Electric

Governor Sets GHG Targets

By 2010, Reduce to 2000 Emission Levels*
By 2020, Reduce to 1990 Emission Levels**
By 2050, Reduce to 80% Below 1990 Levels

* Equals 59 Million Tons Emission
 Reductions, 11% Below Business As Usual

** Equals 145 Million Tons EmissionReductions, 25% Below Business As Usual



Governor's Executive Order

 Cal EPA Leads a Coordinated Effort
 Scenario Analysis to Evaluate Climate Impacts to California on:

- Public Health
- Water Quality and Supply
- Agriculture
- Forests
- Coastline
- Adaptation Planning
- Economic Impact Modeling

Climate Action Team

 Cal EPA Secretary Chairs the Team
 Other State Agencies with Energy- and Transportation-related Authority on the Team

□The CAT will:

- Evaluate Strategies, including Cap and Trade to Meet Targets
- Report on Scenario Analysis
- Report to Governor and Legislature in January 2006 and Biennially

Cornerstone Strategies Underway

Motor Vehicle Regulations

- Transportation is the Largest Source of Emissions in the State
- Reduce Emissions by 30 Percent by 2016

Efficiency Measures

- Despite Growing Energy Demands, Cal Per Capita Energy Use Has Remained Flat For 30 Years
- Renewable Portfolio Standard
 - Gov Schwarzenegger Accelerated RPS To 20% By 2010 And Is Committed To 33% By 2020

Climate Action Team Report

Action Oriented

- State Agencies, such as Energy Commission,
 Public Utilities Commission, and Air
 Resources Board, Actions Needed to Meet the
 Targets
- Provides Direction for the Next Two Years
 - Scenario Analysis
 - Economic Analysis



Draft Climate Action Team Report released December 7 Public Meeting Sacramento in December 13 Progress Report to the Governor in January 2006 www.climatechange.ca.gov

"There's a lot we need to do," Ethan says.

"People should be thinking about Santa."



Ethan Matsuda, 7, is worried about the future of Santa Claus.

He's been reading about global warming and concerns that pollution and reckless energy use could be warming the Earth's atmosphere.

And that, he concluded, could be threatening the ice around the North Pole.

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