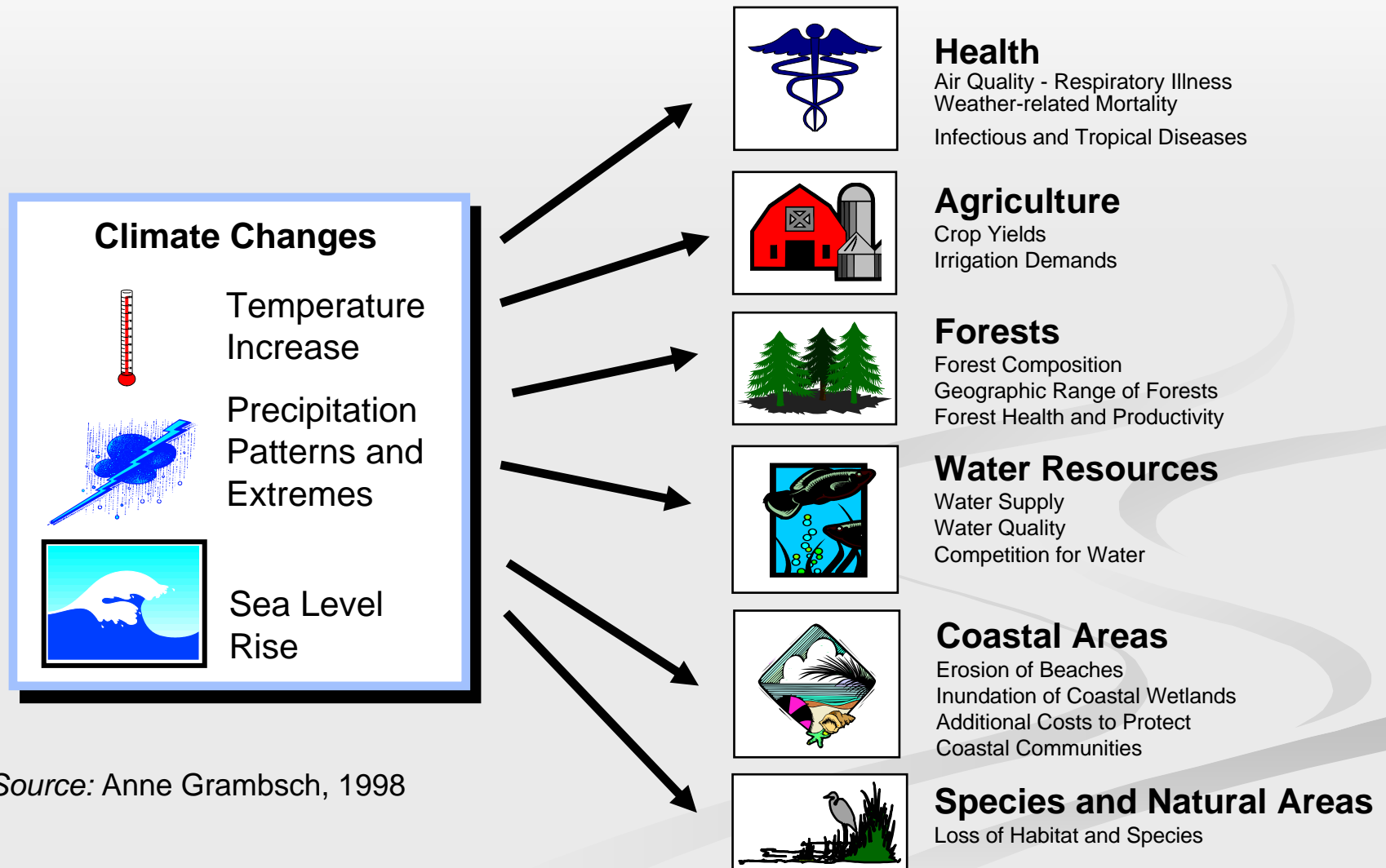




FRAN PAVLEY

**Assemblymember
California Legislature
*2000-2006***

Potential Climate Change Impacts on California

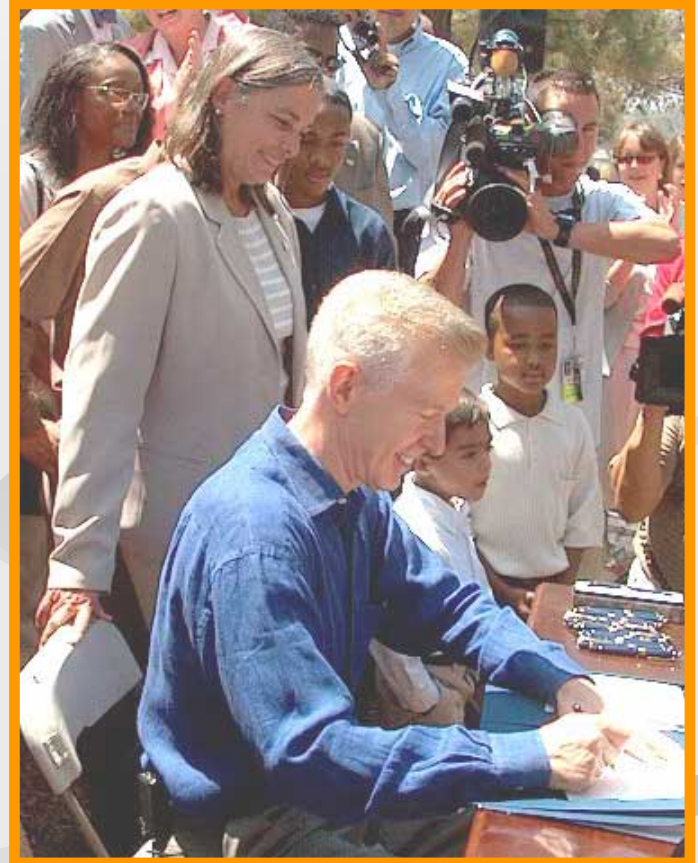


Source: Anne Grambsch, 1998

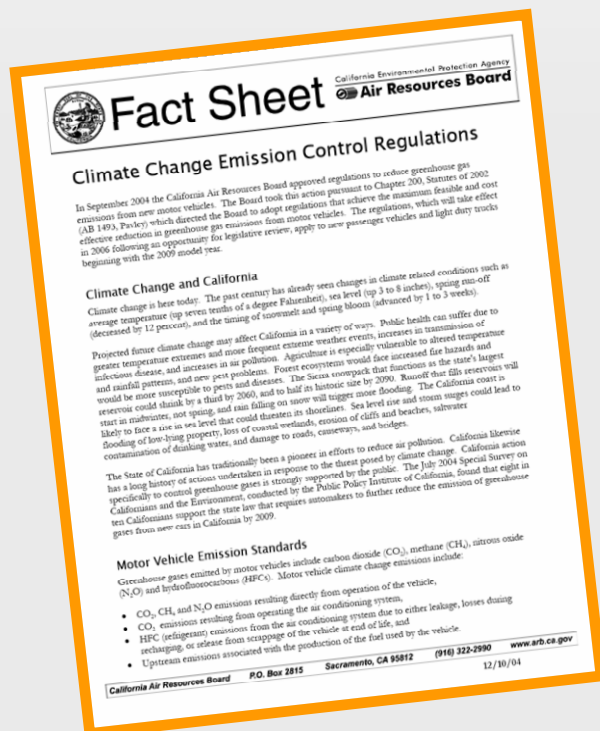
Assembly Bill 1493 Signed

July 22, 2002

Governor Gray Davis signed Assembly Bill 1493, a law that directed the California Air Resources Board (CARB) to adopt regulations to achieve the “maximum feasible and cost effective reduction of greenhouse gases (GHG) from motor vehicles beginning with model year 2009”



AB 1493 -- The Regulations



- Requires carmakers to reduce GHG from their vehicle fleets by approximately 30% by 2016

- Developed two standards --

- Cars and lightest trucks

- Heavier vehicles

- Created near-term (2009-2012) and mid-term standards (2013-2016)

- CARB approximates cost for new cars to increase by \$300

AB 1493 -- Implementation

Under the Clean Air Act, other states can adopt California standards or Federal standards. The following states have adopted or will adopt California's "Clean Car" regulations.

- *Connecticut*
- *Maine*
- *Massachusetts*
- *New Jersey*
- *New York*
- *Oregon*
- *Pennsylvania*
- *Rhode Island*
- *Vermont*
- *Washington*

AB 1493 -- Legal Challenges

Lawsuits were filed by domestic and foreign automobile companies in December 2005, claiming...

Clean Air Act

EPA has determined that Congress did not authorize EPA to regulate CO₂ or any other greenhouse gas under the Act -- “precludes” EPA granting a waiver of preemption

CAFE Standard

CA’s global warming regs are preempted by the federal CAFE in two ways: they are “related to” fuel economy, and they are inconsistent with NHTSA accomplishment of federal objectives.

Canada Signs Landmark Agreement with Its Auto Industry



On April 5, 2005, the Government of Canada and the Canadian automotive industry signed a major Memorandum of Understanding (MOU) on climate change. Under the MOU the Canadian auto industry will take actions to voluntarily reduce GHG emissions of new vehicles in Canada so that by 2010, annual emission reductions will reach 5.3 megatonnes.

Executive Order S-3-05

On June 1, 2005, Governor Arnold Schwarzenegger issues order and states that the debate on climate change is over.

Further he said, “By working together we can meet the needs of both our economy and environment. Together we can continue California’s environmental heritage and legacy of leadership in innovation in cutting edge technology.”



Targets

From the Governor's Executive Order

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80 percent below 1990 levels

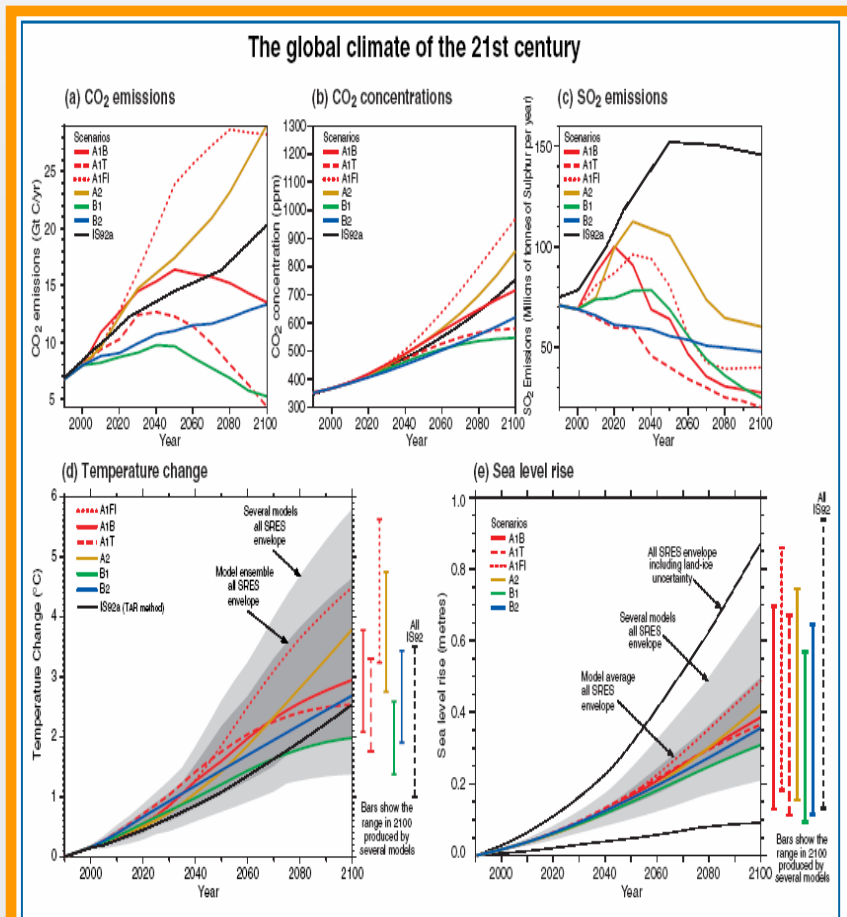


Figure 5: The global climate of the 21st century will depend on natural changes and the response of the climate system to human activities.

AB 32 (Nunez-Pavley)

Why California?

- 12th largest emitter of global warming pollution in the world.
- When California takes action, the impact is felt around the country and the world.
- California can gain a competitive advantage in the clean energy market by acting first.

AB 32

Main Provisions

- Mandates reporting of emissions from significant sources by January 1, 2008.
- Requires the California Air Resources Board (CARB) to cap GHG emissions at 1990 levels.
- Emission reductions to begin in 2012 and be achieved by 2020.

AB 32

Additional Provisions

- Develops a list of early actions by July 1, 2007 and adopts regulations by January 1, 2010.
- Includes a scoping plan to achieve statewide GHG emissions reductions by January 1, 2009.
- Allows CARB to adopt regulations on the use of market mechanisms to achieve reductions.

AB 32 -- Supporters

- *42 Assembly co-authors and 15 Senate co-authors*
- *U.S. Senators Feinstein and Boxer and 8 members of Congress*
- *48 cities/counties*
- *Air, water and utility districts*
- *Health organizations and professionals*
- *Faith-based organizations*
- *Business organizations and leaders*
- *Organized labor*
- *Public interest groups*
- *Entertainment industry*
- *Investment communities*
- *Technology and biotechnology industries*
- *Editorial support from media*
- *Environmental and conservation organizations*

AB 32

Timeline to Implementation

- **June 30, 2007** -- Early Action Emission Reduction Measures
- **July 1, 2007** -- Environmental Justice and Economic/Tech advisory boards convene
- **Jan. 1, 2008** -- Determination of 1990 baseline levels and report on biggest emitters
- **Jan. 1, 2009** -- Approval of plan for maximum reduction by 2020 (update every 5 years)
- **Jan. 1, 2010** -- Adopt regulations for early action measures
- **Jan. 1, 2011** -- Adopt regulations on emission limits and reduction measure which must be real, permanent, quantifiable, verifiable, and enforceable, in addition to cap, in same period
- **Jan. 1, 2012** -- Emission limits begin
- **Jan. 2, 2020** -- Emission reductions achieved and stay in force beyond 2020

GHG Reduction Opportunities Identified by Climate Action Team Report

Strategies	Reductions in 2020 (MMTCO ₂ e)	Percent of Reductions in 2020
1. Energy Efficiency	30	16%
2. Renewable Energy	17	9%
3. Cleaner Power Plants	16	8%
4. Clean Cars	48	25%
5. Renewable Fuels	4	2%
6. Smart Growth	27	14%
7. Water Efficiency	1	1%
8. Forestry	35	18%
9. Other Strategies	13	7%
10. Innovation	Not estimated	N/A
TOTAL	192	100%

What Else is California Doing?

- Renewable Portfolio Standards - 20%
- Million Solar Roofs
- AB 1007 - Alternative Fuels
- Fuel Cell Partnership
- Local Government Actions
- Energy Efficient Appliances
- Green Building Designs
- SB 1368 (Perata)



SB 1368 (Perata)

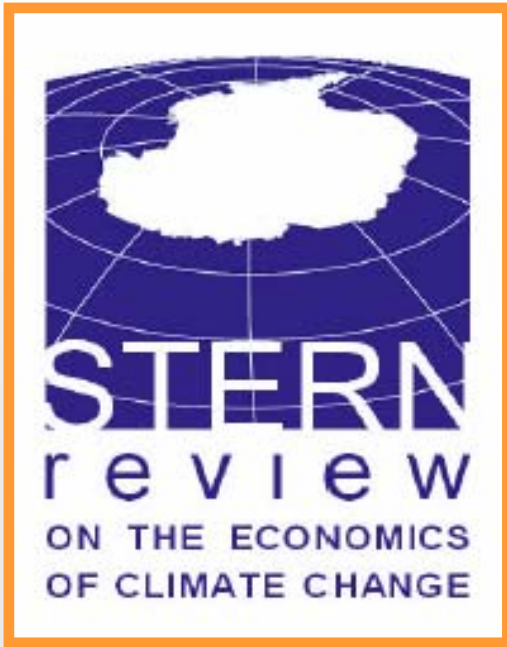
Main Provisions

- GHG emissions from new or upgraded power plants for baseload generation must be as low or lower than GHG emissions from new, combined-cycle natural gas power plants.
- GHG performance standard will apply to all in-state and out-of-state generators that provide power to California.
- Electric Reliability -- ensures that the standards will not negatively impact the reliability of the energy services that California ratepayers receive.
- CEC and CPUC Regulations -- these Commissions are required to adopt regulations through a public process.

What's Driving Green-tech Investment?

- Rising cost of fuel
- Economic expansion of China, India and other Asian nations.
- Growing concerns on global warming
- War in the Middle East and too much reliance on foreign oil
- Desire for a secure energy future

AB 32 sends a strong signal to the market for clean technologies by adopting an enforceable cap.



October 30,2006

*Sir Nicholas Stern for
the Government of the
United Kingdom*

Conclusions:

- There is still time to avoid the worst impacts of climate change, if we take strong action now.
- The Review estimates that if we don't act, the overall costs and risks of climate change will be equivalent to losing at least 5% of global GDP each year, now and forever.
- In contrast, the cost of action -- reducing GHG emissions to avoid the worst of climate change -- can be limited to around 1% of global GDP each year.

We're in an Environmental and Economic Race



- Impacts of Global Warming are visible and accelerating
- California is seizing this opportunity to become the home of clean technologies and alternative fuels

FRAN PAVLEY

P.O. Box 1833
Agoura Hills, CA 91376
Tel: (818) 865-1385

