

USEPA's Climate Change Efforts

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SWRCB/DWR Climate
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Overview

- EPA's role in Climate Change
- Energy/Water/GHG Nexus
 - Office of Water Climate Change Strategy
 - Energy Star
 - WaterSense
 - Low Impact Development
 - Clean EnergyEnvironment Municipal Network
- Other Voluntary CO₂ Programs
- Legislative Proposals in 110th Congress
- Closing Thoughts

EPA's Role in Climate Change:

- Contribute significantly to Bush's goal of 18% reduction in GHG intensity by 2012
- Challenge businesses, state and local gov'ts to reduce their emissions through voluntary partnerships. Estimated Success:
 - GHG Reductions: 86 MMTCE (2005)
 - Energy Saved: 768.8 trillion BTUs (2000)
- Provide near-term solutions while other agencies invest in long-term R&D
- Prepare annual GHG Inventory Report

Energy/Water/GHG Nexus

- Water transport, treatment and delivery = Approx. 19% CA Energy Use
- Climate Change will intensify the need to look at water holistically
 - Assimilative capacity for wastewater effluent
 - Rising sea levels-->saltwater intrusion
 - Greater need for water conservation and efficiency
 - Need to adapt to decreasing snowpack
 - Reduced surface water flow = reduced groundwater recharge

USEPA National Water Program Climate Change Workgroup

- Reviewing climate change information
- Evaluating potential impacts on water programs
- Identifying potential response actions
- Developing Climate Change Strategy for the National Water Program
 - Mitigation
 - Adaptation
 - Research

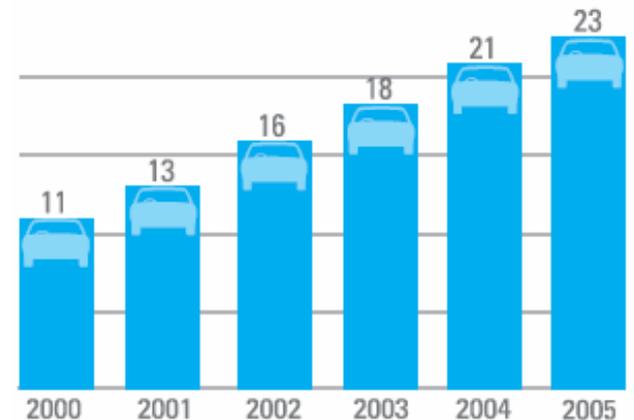


ENERGY STAR

- Reduce greenhouse gas (GHG) emissions through large win-win-win opportunities with today's energy efficient technologies and practices
 - 30% savings in many buildings, homes, and facilities
- Provide credible information to buyers to
 - reduce transaction (research) costs
 - reduce perceptions of risk
 - enhance investment in efficient technologies and practices
- Work with the marketplace to build on motivations of important individual actors



UTILITY BILL SAVINGS
(in billions)



EMISSIONS SAVED IN
VEHICLE EQUIVALENTS (in millions)

Source: Energy Star® Overview of 2005 Achievements



ENERGY STAR Water and Wastewater Industry Focus

Partners: Drinking water, POTW's, Industry, Nat'l and State Associations Developing:

- Energy Performance Rating System
- Energy Efficiency Assessment and Opportunities--Best Practices
- Energy Management Guidelines
- Financing Energy Efficiency Projects
- Technical Training and Support for use of EPA ENERGY STAR rating system and tools
- EPA Recognition of Energy Performance Tools



WaterSense: “Efficiency Made Easy”

- Voluntary Partnership
- Promotes and Enhances Markets for Water-Efficient Products and Services
- Products Labeled through WaterSense
- Examples:
 - High Efficiency Toilets or Bath Faucet
 - Landscape Irrigation Services
 - Irrigation Control Technologies
- epa.gov/watersense/

Low Impact Development (LID)

- LID Literature Review & Fact Sheets
- LID Design Strategies
- LID Hydrologic Analysis
- Field Evaluation of Permeable Pavements for Stormwater Mgm't
- Links to:
 - LID Design Center
 - LID Urban Design Tools
 - LID for Big Box Retailers
 - Others
- www.epa/owow/nps/lid



- Launched in November
- Clean Energy Strategies for Local Government
- Information Sharing Resource
- Designed to:
 - Reduce GHG & Air Pollutants
 - Lower Energy Costs
 - Improve Reliability and Security of Energy Systems
- www.epa.gov/cleanenergy/stateandlocal

Other Voluntary Partnerships Targeting Major CO₂ Sources

- State Clean Energy-Environment Partnership
- WasteWise
- Green Power Partnership
- Combined Heat & Power (CHP) Partnership
- Coal Combustion Products Partnership
- Best Workplaces for Commuters
- Green Vehicle Guide
- Voluntary Diesel Retrofit Program
- Clean School Bus USA
- Green Suppliers Network
- Climate Leaders



Climate Change in the 110th Congress

- Many climate-related bills introduced
 - 11 cap-and-trade bills
 - 18 transportation/CAFE bills
 - 9 other climate/energy bills
 - 4 foreign policy bills
- Hearings on climate issues
 - Senate: EPW, Commerce, Energy, Finance, Transportation
 - House: Government Reform, Energy and Commerce, Science, Transportation, Ways and Means, Select Committee on Climate Change
- Staff workshops
 - Senate and House Energy held workshops to educate staff
 - EESI other groups many staff/public sessions

Closing Thoughts

- EPA will continue and expand our successful voluntary programs including water and wastewater. *Significant* GHG reductions have already been achieved:
 - Estimated GHG Reductions of **86 MMTCE** (2005)
 - Energy Saved: 768.8 trillion BTUs (2000)
- Considerable opportunities for reducing GHG through local government partnerships for energy and water conservation
- Momentum building in Congress and States/Locals are out in front

Closing Thoughts

- California can adopt progressive policies and programs to encourage and incentivize water conservation and energy efficiency
 - Evaluate rate relief to private water companies when they invest in efficiency
 - Decouple profit from consumption in rates (Similar to CA Energy Utilities)
 - Understand energy intensity of water by geographic location/use
 - Compare price of water to production Costs
 - Promote more energy efficient utilities (pumps, aerators, etc.)

Further Information

- U.S. EPA Climate Change

www.epa.gov/climatechange/

- ENERGYSTAR

www.energystar.gov

U.S. EPA State and Local Clean Energy Programs

www.epa.gov/cleanenergy/stateandlocal

- WaterSense

www.epa.gov/watersense/

- Low Impact Development

www.epa/owow/nps/lid