

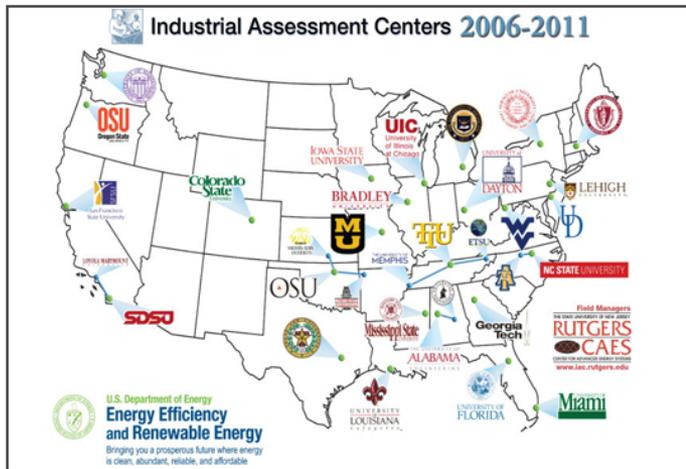
Energy Efficiency Policy Prospects Today

A Presentation to the IAC Forum

February 5, 2009

Brian Castelli

Executive Vice President, Alliance to Save Energy



ALLIANCE TO
SAVE ENERGY

Creating an Energy-Efficient World

What is the Alliance to Save Energy?



ALLIANCE TO
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Creating an Energy-Efficient World

- Mission: promote energy efficiency worldwide to achieve a healthier economy, a cleaner environment, and greater energy security
- Co-Chairs: Sen. Mark Pryor (D-AR) and James Rogers (CEO, Duke Energy)
- Guided by a 37-Member, Elected Board of Directors



Senator Mark
Pryor (D-Ark.)

Jim Rogers, CEO
Duke Energy



Bi-partisan, bi-cameral Honorary Vice Chairs

Forging Partnerships: Business, Govt. & Public Interests



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- Alliance enjoys sponsorship by more than 155 businesses and organizations across a broad spectrum of economic sectors
- Unique structure with expertise in research, policy advocacy, education, technology deployment, and communications



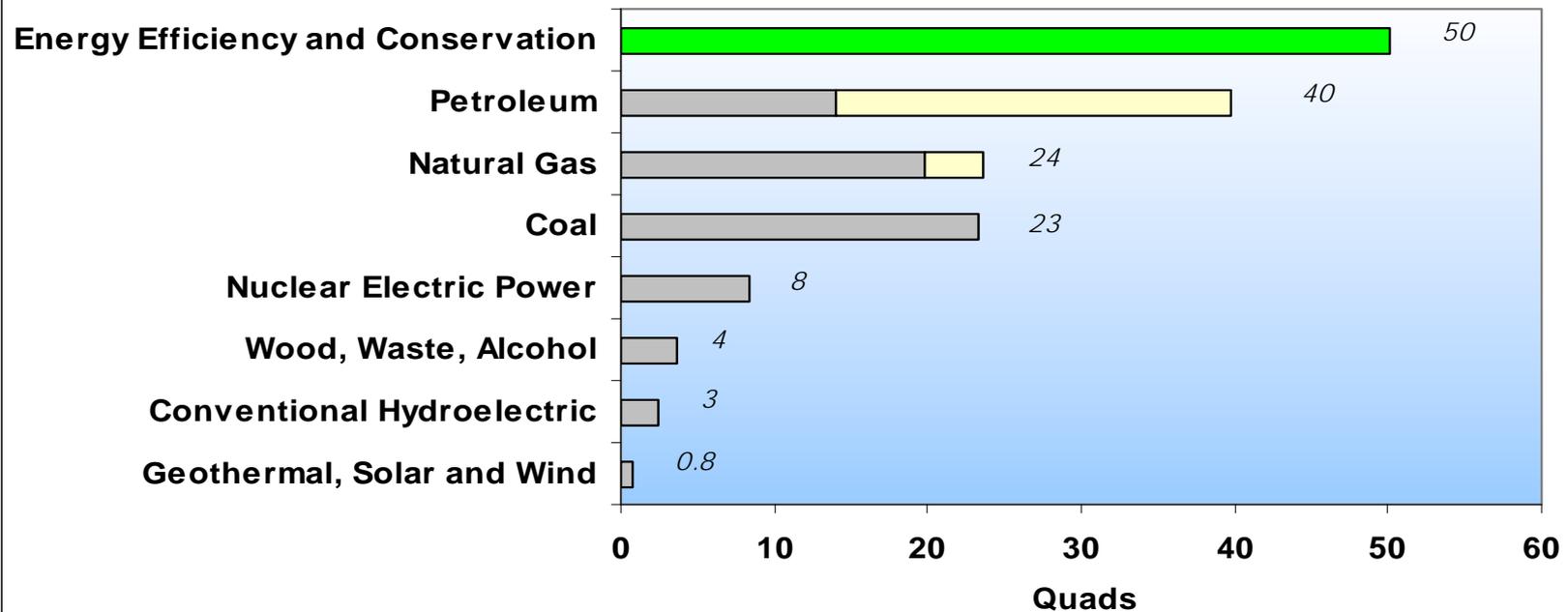
Why Energy Efficiency?

Its Powerful, Plentiful & Domestic



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America's Greatest Energy Resource
*Energy Efficiency and Conservation Improvements Since 1973
Have Reduced Annual Energy Consumption by 50 Quads*



Alliance to Save Energy
August 2008

■ 2007 Domestic Production

■ Net Imports

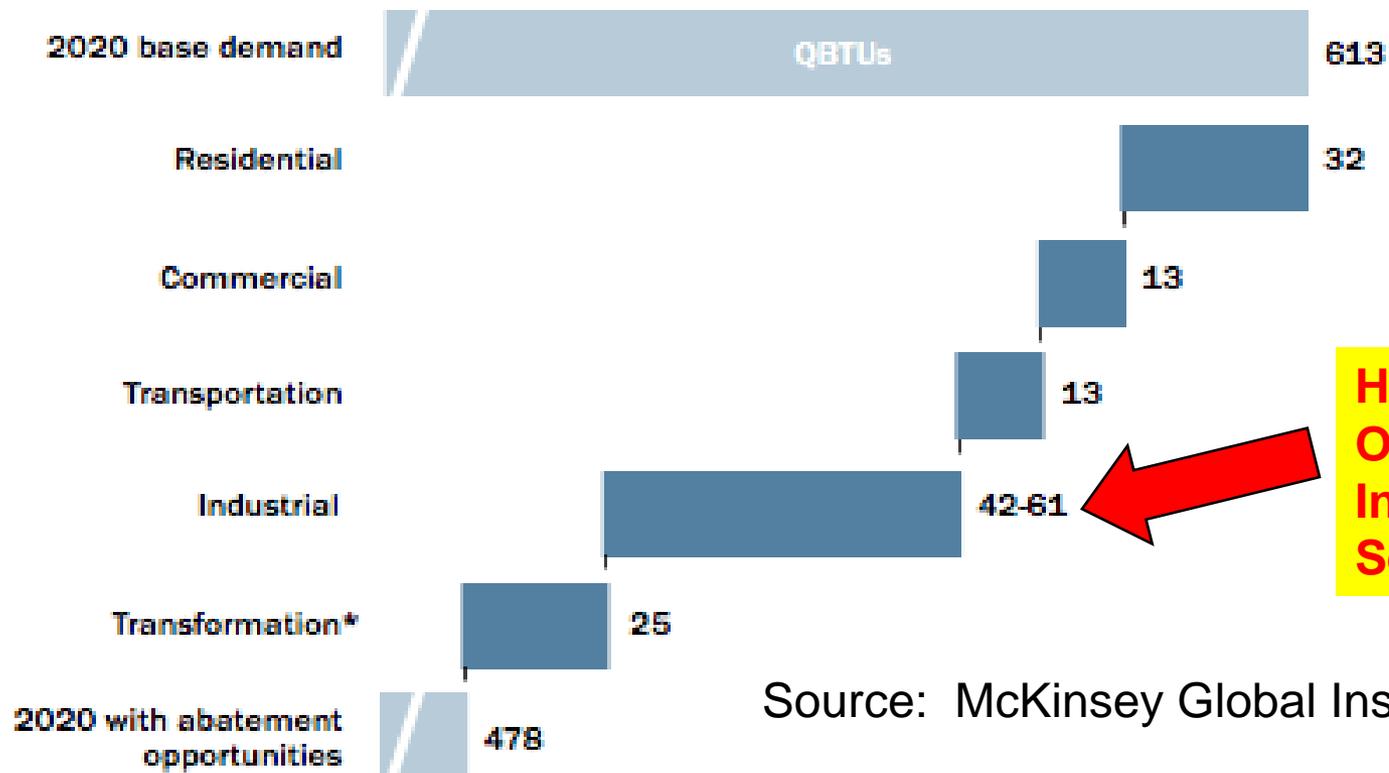
Why Energy Efficiency? It's the Gift That Keeps on Giving



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LARGE OPPORTUNITIES FOR IMPROVING ENERGY PRODUCTIVITY ARE AVAILABLE

Potential demand reduction in 2020 through enhanced energy productivity



Huge Opportunity In Industrial Sector

Source: McKinsey Global Institute

Policy, Technology & Innovation



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Integration and Synthesis

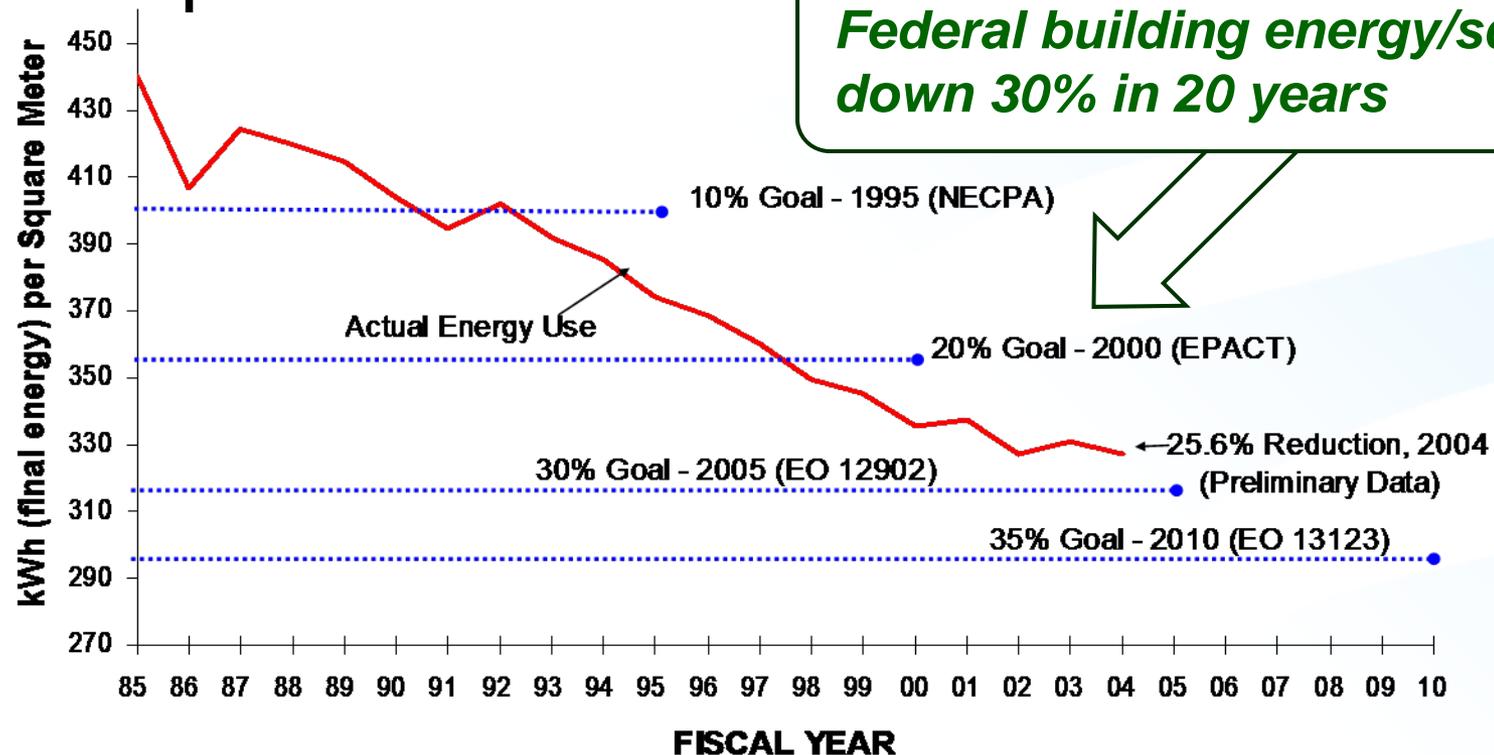
- Policy – legislation, regulation, standards
- Technology – can drive or be driven by Policy and developed through Public/Private partnerships
- Innovation – derived from need and fed by policy and technology

Public Sector Leadership in Energy Efficiency



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- Energy savings goals + report cards
- Public buildings
- Public procurement



Consumer Campaigns



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Super Powers

EPA, NYSERDA, Alliance
Nationwide TV & Radio

\$30 Million in Donated Media
3.9 Billion Audience
Impressions



A Partnership of the U. S. Department of Energy
and the Alliance to Save Energy

Powerful Savings

DOE & Alliance Partnership
All Media Outlets

The Power is In Your Hands

Industry, DOE, EPA, Alliance
All Media Outlets, Web &
Collateral



Energy Hog

DOE, Ad Council, Alliance, States
All Media Outlets

Web, Collateral Materials
\$134 Million in Donated Media
\$6.5 Million in Last Quarter
11,000 Students Educated



www.energyhog.org

Eureka \$mart House

Energy-Efficiency Challenge

NBC Universal, Industry, DOE, / 
On Air, Web—Home Makeover Contest

Alliance's Green Schools Program



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■ Program Goals:

- **Educate students** about energy and the link between energy and the environment
- **Save Energy** at school
- Affect residential energy use by sending information home with students
- Train the next generation of energy professionals



Commercial Buildings Initiative Overview



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- EISA-07 authorizing language
- **Goal:** *Transform US commercial buildings to net-zero energy use & carbon by ~2030*
- Public-Private consortium: R&D through market transformation
- DOE seed funding:
 - 2 planning workshops: ~200 participants
 - Sectoral analysis
 - CBI Action Plan
- Appropriations dropped from FY08 omnibus
- Website www.zeroenergyCBI.org



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U.S. Department of Energy
Energy Efficiency
and Renewable Energy



World Business Council for
Sustainable Development



ASE's Industrial Activities

■ Past

- Support DOE Steam Challenge/BestPractices
 - Training development & delivery; newsletter; Steering Committee
- Developing technical resources
- Industrial Partnerships

■ Present

- Outreach for Save Energy Now & Save Energy Now Leaders initiative
- Analyses and reports
- Systems Assessment Standards Development
- Liaison between DOE and U.S. pump industry

ASE's Industrial Activities – 2009 & Beyond



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- Expanded outreach and communications for ITP
- Additional analyses and reporting
- Explore international industrial e-e partnership
- Sustainability guide for small/medium enterprises
- Develop an **Industrial Energy Efficiency Coalition**
- **Our Growth = increased staffing needs**
 - IAC students welcomed!!
 - Contact Vestal Tutterow at vtutterow@ase.org

Realizing the Potential: Federal Policy



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- Energy Policy Act of 2005 will by 2020:
 - Reduce U.S. energy use by 2%
 - Reduce electricity demand by 4%
 - Reduce oil use by 0%
 - Reduce CO₂ emissions by 3%

- Energy Independence and Security Act of 2007 will by 2020 (2030):
 - Reduce U.S. energy use by 4% (7%)
 - Reduce electricity demand by 4% (5%)
 - Reduce oil use by 5% (10%)
 - Reduce CO₂ emissions by 5% (9%)

Estimates from ACEEE, ASE

Our Government at Work: Extension of Tax Incentives



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New Homes

Builder tax credit - up to \$2,000 if 50% more efficient compared to 2004 IECC code; \$1,000 for an Energy Star manufactured home. (Through 2009)

Existing Homes

Homeowner tax credit – 10% of cost of installing building envelope components consistent with IECC 2000; capped at \$500; \$200 can apply to windows. (Through 2009)

Commercial Buildings

Deduction up to \$1.80/sq.ft. for buildings designed to use 50% less energy than ASHRAE-90.1 (Through 2013)

Public Buildings: *Assignable deduction!*

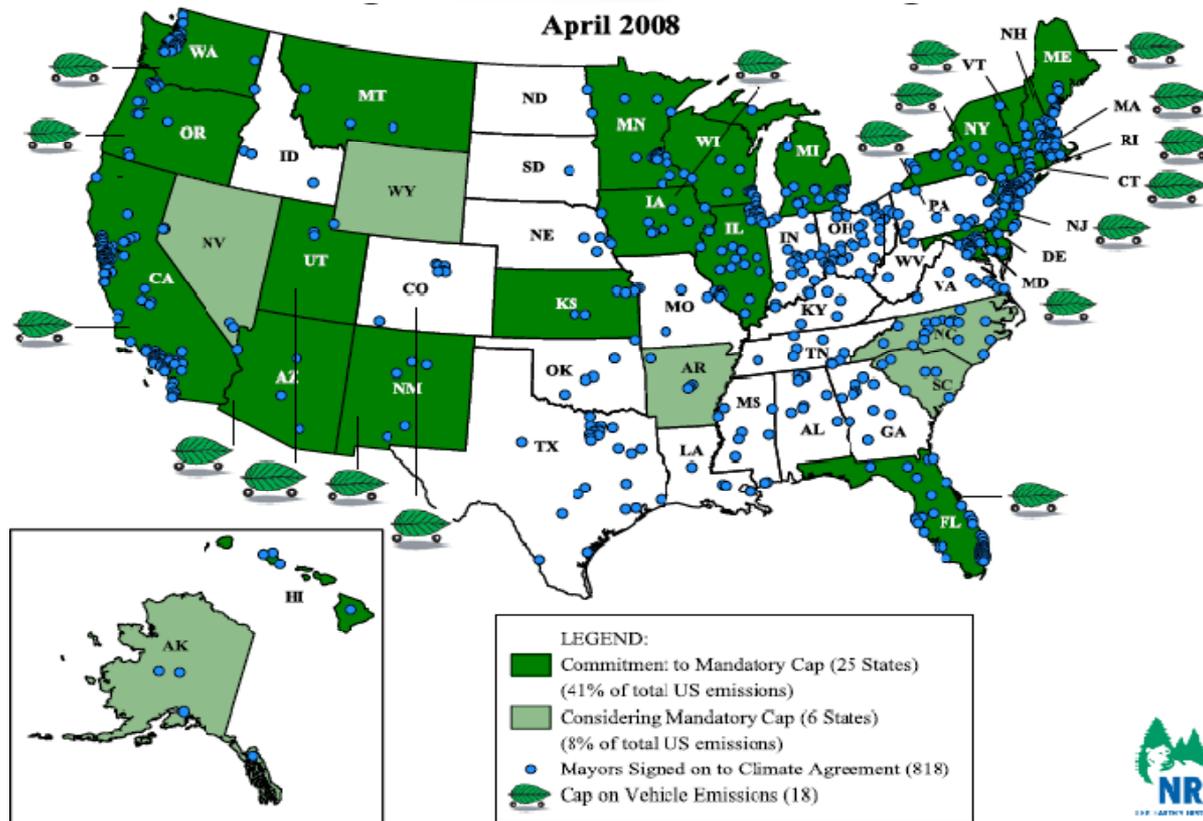
But Policy Innovation Occurs at the State and Local Levels



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States are realizing the need to address climate change...

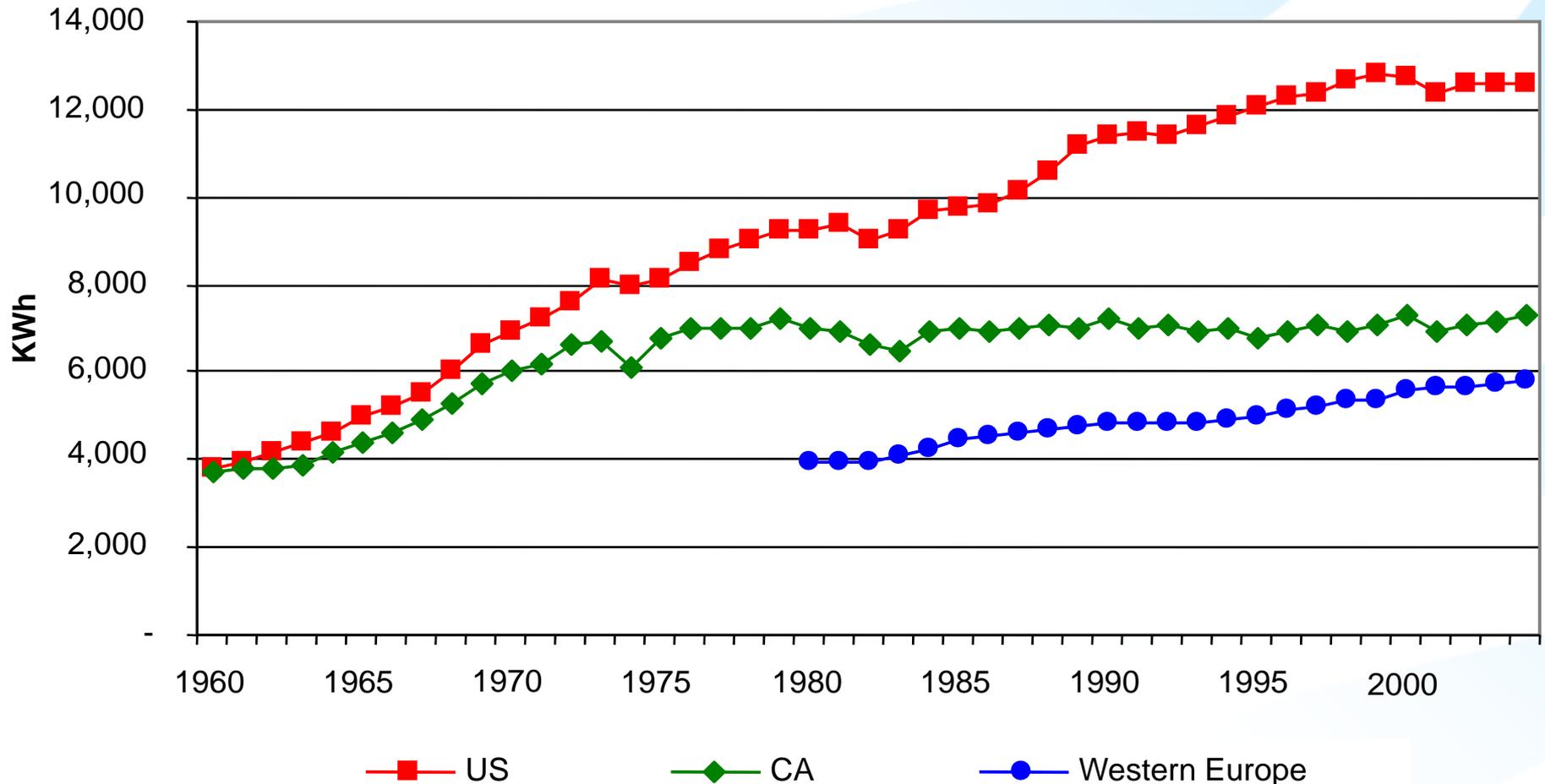


Policies and Investment Make a Difference!



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Driving Energy Efficiency at “Ground Zero” – Local Initiatives



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The Energy Efficiency Partnership of Greater Washington

Goal Reduce greenhouse gas emissions 20 to 50% from existing buildings in the Washington DC region through a collaborative partnership.

Advocates Businesses, banks, local governments and energy services companies

How financing for building retrofits and the means to repay costs from accrued energy savings over time.

Education, Outreach and Research by founding partner
Virginia Tech



Driving Energy Efficiency at “Ground Zero” – Local Initiatives



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The Cambridge Energy Alliance

- City-sponsored organization
- works with **homeowners**, **businesses** and **institutions** to reduce Cambridge’s carbon footprint
- Mostly free energy audits
- Up to 30% reductions in energy bills
- Energy efficiency upgrades with no up front cash required
- A one-stop energy solution garnering energy savings and expansion of clean energy sources.



The City of Chicago

- Chicago Green Homes initiative
- Green Roof on City Hall: Increases energy efficiency of the building
- Chicago Center for Green Technology
- The Chicago Standard: LEED certification for all new municipal buildings



On the Horizon...



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... More Energy
Efficiency?



Green jobs and EE: Top of the President's Agenda



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the WHITE HOUSE PRESIDENT BARACK OBAMA

the BRIEFING ROOM the AGENDA the ADMINISTRATION ABOUT the WHITE HOUSE our GOVERNMENT CONTACT us

THE AGENDA • ENERGY & ENVIRONMENT

ENERGY AND THE ENVIRONMENT

The energy challenges our country faces are severe and have gone unaddressed for far too long. Our addiction to foreign oil doesn't just undermine our national security and wreak havoc on our environment -- it cripples our economy and strains the budgets of working families all across America. President Obama and Vice President Biden have a comprehensive plan to invest in alternative and renewable energy, end our addiction to foreign oil, address the global climate crisis and create millions of new jobs.

The Obama-Biden comprehensive New Energy for America plan will:

- Help create five million new jobs by strategically investing \$150 billion over the next ten years to catalyze private efforts to build a clean energy future.
- Within 10 years save more oil than we currently import from the Middle East and Venezuela combined.
- Put 1 million Plug-In Hybrid cars -- cars that can get up to 150 miles per gallon -- on the road by 2015, cars that we will work to make sure are built here in America.
- Ensure 10 percent of our electricity comes from renewable sources by 2012, and 25 percent by 2025.
- Implement an economy-wide cap-and-trade program to reduce greenhouse gas emissions 80 percent by 2050.

Create Millions of New Green Jobs

- Ensure 10 percent of Our Electricity Comes from Renewable Sources by 2012, and 25 percent by 2025.
- Deploy the Cheapest, Cleanest, Fastest Energy Source - Energy Efficiency.
- Weatherize One Million Homes Annually.
- Develop and Deploy Clean Coal Technology.
- Prioritize the Construction of the Alaska Natural Gas Pipeline.

Reduce our Greenhouse Gas Emissions 80 Percent by 2050

- Implement an economy-wide cap-and-trade program to reduce greenhouse gas emissions 80 percent by 2050.
- Make the U.S. a Leader on Climate Change.

THE AGENDA

- Civil Rights
- Defense
- Disabilities
- Economy
- Education
- Energy & Environment
- Ethics
- Family
- Fiscal
- Foreign Policy
- Health Care
- Homeland Security
- Immigration
- Iraq
- Poverty
- Rural
- Seniors & Social Security

LATEST NEWS and UPDATES

READ THE BLOG

THE AMERICAN PRESIDENTS

1. PARTICIPATE

OFFICE of PUBLIC LIAISON
CHANGING the WAY AMERICANS ENGAGE WITH THEIR GOVERNMENT

MORE INFORMATION

“Help create 5 million new jobs...by investing \$150 million in clean energy future”

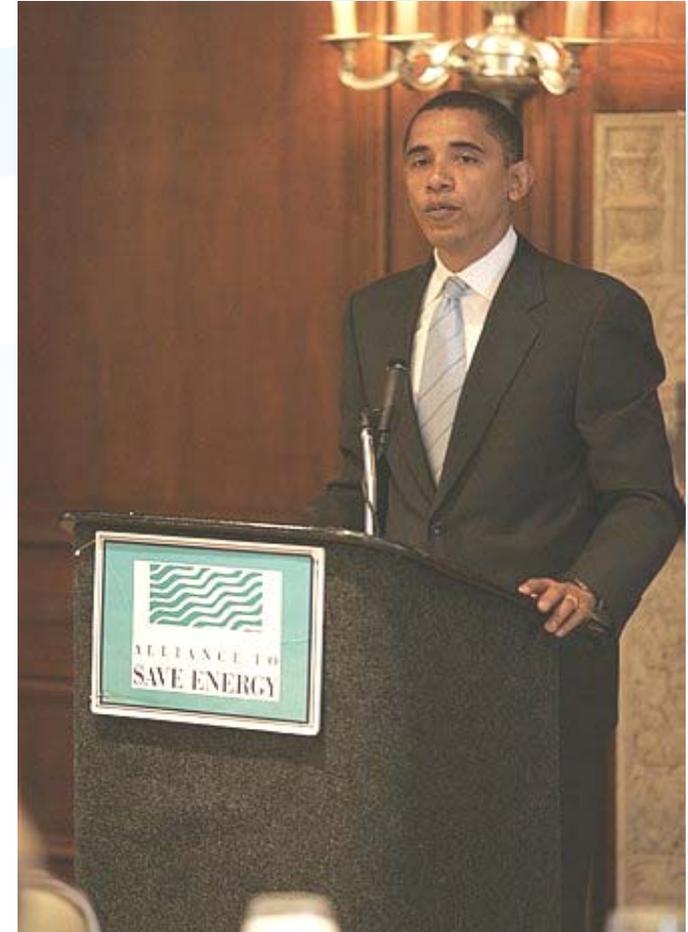
“Deploy the cheapest, cleanest, fastest energy source: energy efficiency”

Energy Efficiency In President Obama's Campaign Platform



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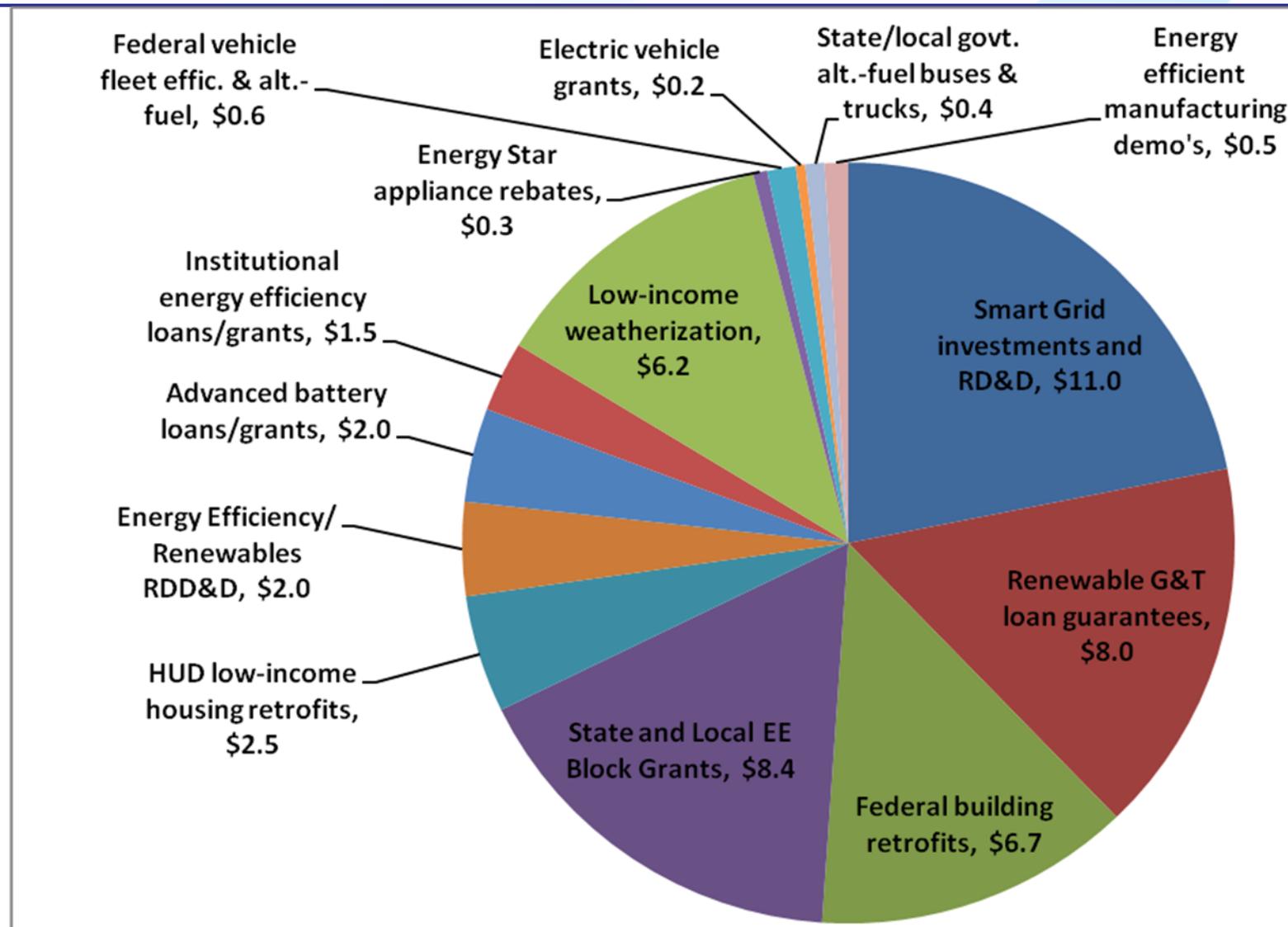
- Reduce electricity use 15% by 2020
- Net-zero energy buildings by 2030
- Overhaul federal appliance standards
- By 2014, reduce energy use in new federal buildings 45%; 25% in existing federal buildings
- Flip incentives for utilities
- Invest in a “smart grid”
- Weatherize 1 million homes/year
- Investment incentives for “livable cities”



First Up-Economic Recovery Bill: \$50 Billion for Energy in House Bill



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Next Up – Energy Bill?

EE Advocates' Recommendations



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- Advanced building energy code targets
 - 30% improvement in 2010
 - 50% improvement in 2020
- Building energy labeling and disclosure (at time of sale or lease)
- Energy Efficiency Resource Standard
 - Utilities to save 10% of electricity sales and 7% of natural gas sales by 2020
- Long-term extensions and restructuring of energy efficiency tax incentives
 - Performance-based
 - New & existing homes and commercial buildings

Followed by Climate Legislation??



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Legislation At-a-Glance

Boxer/Lieberman/Warner

- Funding for energy efficiency to increase many-fold, perhaps to \$5-50 billion each year from 2012 to 2050.
- Dedicated efficiency funds for mass transit, local governments, commercial buildings, appliances, and manufacturers.
- Efficiency is an option for major funding to utilities and states.

Feinstein-Snowe-Collins Efficiency Amendment

- Sets aside for energy efficiency 30% of pool of emissions allowances that will go to local distribution companies.
- Incentivizes states to enact energy-efficiency programs and policies, in addition to rewarding those that have already acted. Includes incentive for adoption of, and compliance with, strong building energy codes.
- Prioritizes energy efficiency for funding to states with manufacturing/coal-driven economies.
- Requires standard evaluation, measurement, and verification rules from the EPA to ensure energy savings are really achieved.
- Adds funding for private-sector energy-efficiency programs, and improves programs for buildings, appliances, and manufacturers.
- Clarifies that research and development funds should be for GHG-reducing technologies.



The Future is Ours to Invent!

- A Future of Promise:
 - U.S. Becomes the Most Energy Efficient Economy in the World
 - The U.S. Economy is Re-built on Development and Deployment of Clean Energy and Technologies
 - Energy Efficiency is the “First Tool” in the Arsenal for Fighting Climate Change

Thank you!



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For More Information....

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