

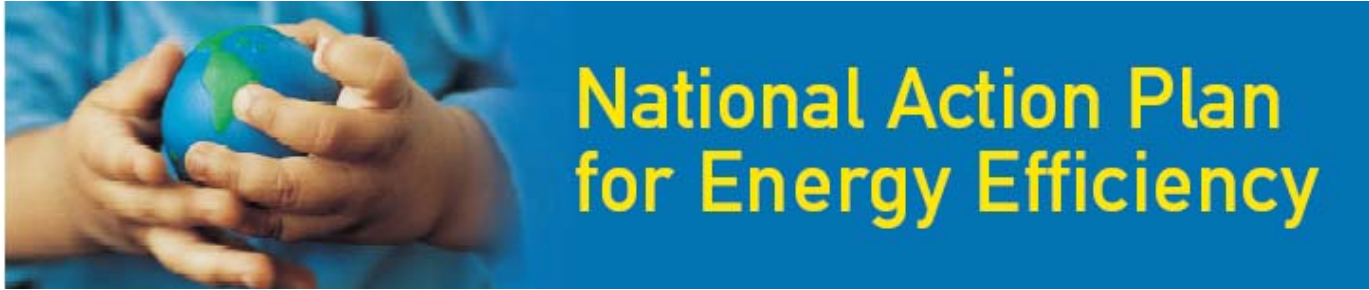
National Action Plan for Energy Efficiency and EPA's Clean Energy-Environment State Partnership

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National Energy Efficiency Plans: What About Implementation?



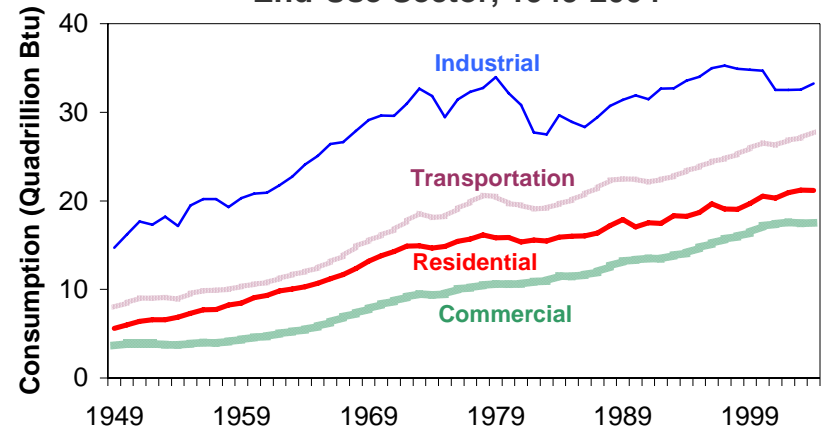
National Action Plan for Energy Efficiency



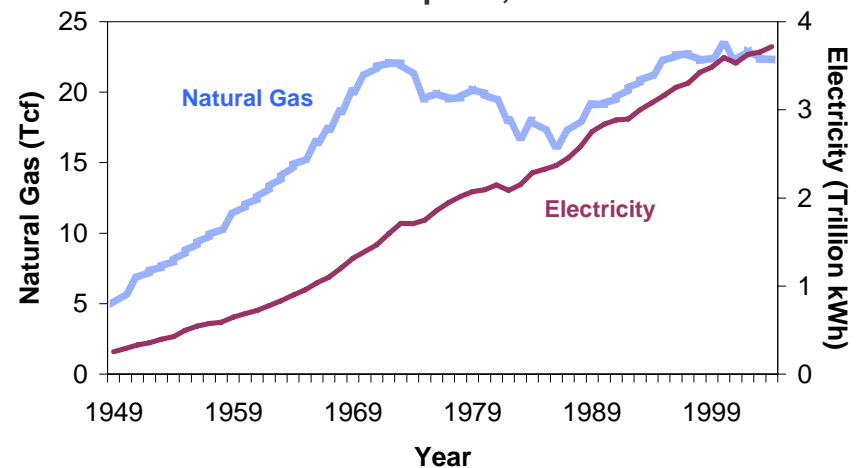
Time for Action on Energy Efficiency

- Energy demand continues to grow
- Higher energy prices than seen for decades
- High energy expenditures
- Reliability issues
- Capital expenses for generation, transmission and congestion relief
- Investment risk associated with climate change
- Security concerns
- *Efficiency can help control electricity growth 50%+*

Total Energy Consumption by End-Use Sector, 1949-2004



Growth in U.S. Electricity and Natural Gas Consumption, 1949-2004



National Action Plan for Energy Efficiency

Goal Statement

To create a sustainable, aggressive national commitment to energy efficiency through gas and electric utilities, utility regulators, and partner organizations.

National Action Plan for Energy Efficiency



- Many cost-effective energy efficiency solutions
 - Well-designed and cost-effective programs that work
 - Significant potential for greater investment and savings
- DOE and EPA facilitated
- Co-Chairs:
 - Commissioner Diane Munns, President of NARUC
 - Jim Rogers, President and CEO of Duke Energy
- 50 member Leadership Group making recommendations and taking action.
 - Recognizes that utilities and regulators have critical role
 - Recognizes success requires the joint efforts of customers, utilities, regulators, states, and other partner organizations
 - Will work across their spheres of influence to remove barriers
 - Commits to take action within their own organization to increase attention and investment in energy efficiency



The Leadership Group

The Leadership Group includes 23 electric and gas utilities, 16 state agencies, and 12 other organizations:

- Alliance to Save Energy
- American Council for an Energy-Efficient Economy
- American Electric Power
- Austin Energy
- Baltimore Gas and Electric
- Bonneville Power Administration
- California Energy Commission
- California Public Utilities Commission
- Servidyne Systems
- Connecticut Consumer Counsel
- Connecticut Department of Environmental Protection
- Connecticut Department of Public Utility Control
- District of Columbia Public Service Commission
- Entergy Corporation
- Environmental Defense
- Exelon
- Food Lion
- Great River Energy
- ISO New England Inc.
- Johnson Controls
- MidAmerican Energy Company
- Minnesota Public Utilities Commission
- Natural Resources Defense Council
- New Jersey Board of Public Utilities
- New Jersey Natural Gas
- New York Power Authority
- New York State Public Service Commission
- North Carolina Air Office
- North Carolina Energy Office
- Ohio Consumers' Counsel
- Pacific Gas and Electric
- PJM Interconnection
- PNM Resources
- Public Advocate State of Maine
- Sacramento Municipal Utility District
- Santee Cooper
- Seattle City Light
- Servidyne Systems
- Southern California Edison
- Southern Company
- Tennessee Valley Authority
- Texas State Energy Conservation Office
- The Dow Chemical Company
- Tristate Generation and Transmission Association, Inc.
- USAA Realty Company
- Vectren Corporation
- Vermont Energy Investment Corporation
- Wal-Mart Stores, Inc.
- Washington Utilities and Transportation Commission
- Waverly Light and Power
- Xcel Energy

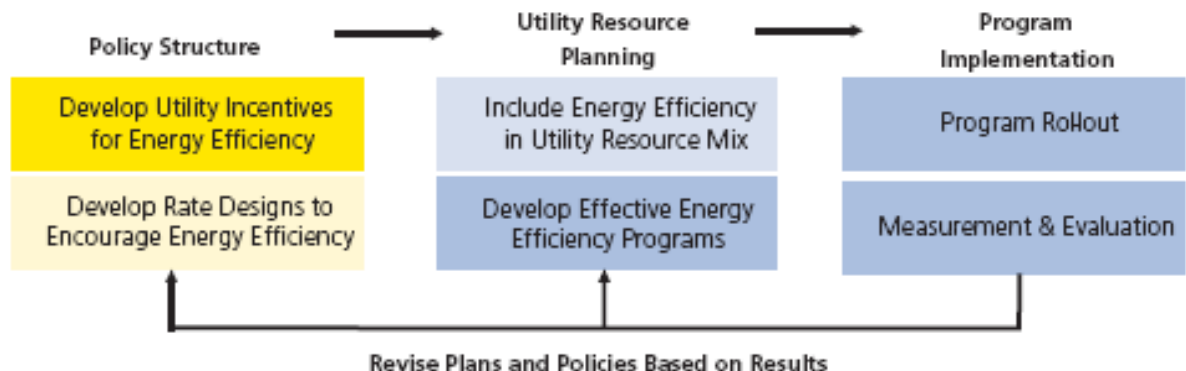
Observers

15 organizations observe the work of the Leadership Group:

- American Gas Association
- American Public Power Association
- Consumer Energy Council of America
- Council of Energy Resource Tribes
- Demand Response Coordinating Committee
- Edison Electric Institute
- Electric Power Research Institute
- Energy Programs Consortium
- Gas Appliance Manufacturers Association
- National Association of Energy Service Companies
- National Association of Regulatory Utility Commissioners
- National Association of State Energy Officials
- National Council on Electricity Policy
- National Energy Assistance Directors' Association
- National Rural Electric Cooperative Association
- North American Insulation Manufacturers Association
- Steel Manufacturers Association

Path to Increased EE Investment

Timeline: Actions to Encourage Greater Energy Efficiency



Action Plan Report Chapter Areas and Key Barriers

| | | | |
|---|---|--|--|
| Utility Ratemaking & Revenue Requirements | Planning Processes | Rate Design | Model Program Documentation |
| EE reduces utility earnings | Planning does not incorporate demand side resources | Rates do not encourage EE investments. | Limited information on existing best practices |

National Action Plan for Energy Efficiency Report

- Four Working Groups
 - Utility Ratemaking and Revenue Requirements
 - Planning Processes
 - Rate Design
 - Program Best Practices
- Led to chapters of the Report
- Leadership Group Recommendations contained in Report:
 - Recognize energy efficiency as a high-priority energy resource.
 - Make a strong, long-term commitment to implement cost-effective energy efficiency as a resource.
 - Broadly communicate the benefits of and opportunities for energy efficiency.
 - Provide sufficient, timely and stable program funding to deliver energy efficiency where cost-effective.
 - Modify policies to align utility incentives with the delivery of cost-effective energy efficiency and modify ratemaking practices to promote energy efficiency investments

Report available on EPA's Clean Energy Web site

www.epa.gov/cleanenergy

Utility Ratemaking and Revenue Requirements

- Explores the utility regulatory approaches that limit greater deployment of energy efficiency as a resource.
 - Removing the throughput incentive is one way to remove a disincentive to invest in efficiency.
 - Offering shareholder incentives will further encourage utility investment.
 - Other disincentives include a short-term resource acquisition horizon and wholesale market rules that do not capture the system value of energy efficiency.
- Many states have experience in addressing financial disincentives in the following areas:
 - Overcoming the throughput incentive.
 - Providing reliable means for utilities to recover energy efficiency costs.
 - Providing a return on investment for efficiency programs that is competitive with the return utilities earn on new generation.
 - Addressing the risk of program costs being disallowed and other risks.
 - Recognizing the full value of energy efficiency to the utility system.

Energy Resource Planning Processes

- Identifies common challenges for integrating energy efficiency into existing planning processes and describes examples of successful energy efficiency planning approaches that are used in six regions of the country.
- Summarizes ways to address barriers and offers recommendations and several options to consider for specific actions that would facilitate incorporation of energy efficiency into resource planning.
 - Cost and Savings Data for Energy Efficiency Measures Are Readily Available
 - Energy, Capacity, and Non-Energy Benefits Can Justify Robust Energy Efficiency Programs
 - A Clear Path to Funding Is Needed to Establish a Budget for Energy Efficiency Resources
 - Integrate Energy Efficiency Early in the Resource Planning Process

Rate Design

- Considers the additional goal of encouraging investment in energy efficiency. While it is difficult to achieve every goal of rate design completely, consideration of a rate design's impact on adoption of energy efficiency and any necessary trade-offs can be included as part of the rate-making process.
- Rate Design Options and Pros and Cons of Various Designs:
 - Inclining Tier Block
 - Time of Use
 - Dynamic Rates (Real-Time Pricing, Critical Peak Pricing, Nonfirm)
 - Two-Part Rates
 - Demand Charges

Energy Efficiency Program Best Practices

Summarizes key findings from a portfolio-level review of many of the energy efficiency programs that have been operating successfully for a number of years and provides an overview of best practices in the following areas:

Making Energy Efficiency a Resource

- Require leadership at multiple levels
- Align organizational goals
- Understand the efficiency resource

Developing an Energy Efficiency Plan

- Offer programs for all key customer classes
- Align goals with funding
- Use cost-effectiveness tests that are consistent with long-term planning
- Consider building codes and appliance standards when designing programs
- Plan to incorporate new technologies
- Consider efficiency investments to alleviate transmission and distribution constraints
- Create a roadmap of key program components, milestones, and explicit energy use reduction goals

Designing and Delivering Energy Efficiency Programs

- Begin with the market in mind
- Leverage private sector expertise, external funding, and financing
- Start with demonstrated program models - build infrastructure for the future

Ensuring Energy Efficiency Investments Deliver Results

- Budget, plan and initiate evaluation
- Develop program and project tracking systems
- Conduct process evaluations
- Conduct impact evaluations
- Communicate evaluation results to key stakeholders

Where Are We Now?

- National Press Roll-out on July 31, 2006
 - Opening plenary session during NARUC summer meetings in San Francisco
 - Released Report and EE Benefits Calculator
 - Media event - opportunity for participants to announce endorsement of Recommendations and specific commitments
 - San Francisco Chronicle *“Renewing the Push for Smart Energy Use”*
 - Bloomberg *“National Energy-Efficiency Action Plan Could Help Consumers Save Money and Beat the Heat, SDG&E Says”*
 - Wall Street Journal *“Utilities Unite in Energy-Conservation Push”*
 - National Public Radio *“Utilities Promote Conservation to Blunt Demand”*
 - More than 84 organizations across 47 states made 62 public statements and commitments to advance energy efficiency

Where Are We Now? (2)

- Commitments in support of the Action Plan announced on July 31 include:
 - Establishing state-level collaborative processes to explore how best to increase investment in energy efficiency
 - Investigating increasing the funding available to pursue cost-effective energy efficiency
 - Conducting formal investigation on ways utilities can remove the link between revenues and sales volume
 - Including energy efficiency on a consistent and comparable basis with supply-side resources in future resource planning activities
 - Meeting a specific energy savings goals within the range of 10-35 percent
 - Providing resources to promote the recommendations from the Action Plan at speaking engagements and other education opportunities
 - Proactively educating consumers the benefits of greater energy efficiency

Where Are We Now? (3)

- Resources for states, utilities and stakeholders
 - National Action Plan for Energy Efficiency Report – covers key barriers and policy options for energy efficiency in resource planning, utility revenue requirements, rate design and program implementation
 - Energy Efficiency Benefits Calculator – designed to educate stakeholders on the broad benefits of energy efficiency.
 - Consumer Energy Efficiency Fact Sheet – designed to help communicate the benefits of efficiency, how utility and state investment in energy efficiency helps consumers, and what to expect from utility or state efficiency programs.
 - ENERGY STAR® - A Powerful Resource for Saving Energy Fact Sheet – communicates how utilities, states and others can utilize ENERGY STAR to deliver energy savings

Next Steps

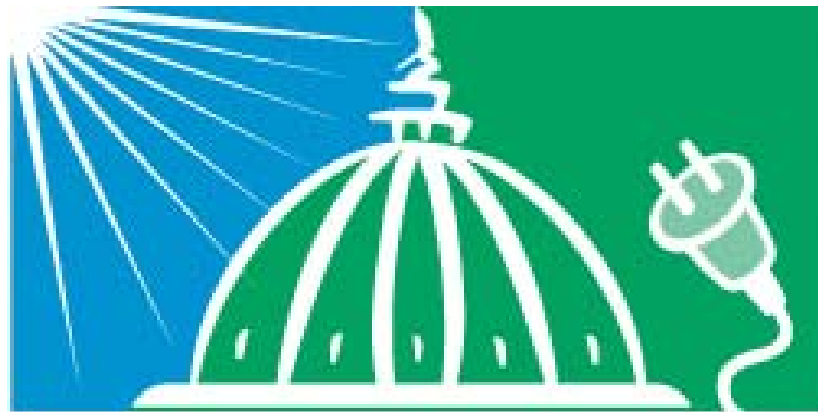
- Develop additional resources
- Winter Leadership Group meeting
- Additional implementation activity
- Monitoring commitments and reporting out with metrics to track success

National Metrics for Reporting Success

- Number of new local, state or regional-level collaborative processes
- Number of new dockets opened to explore greater use of energy efficiency across the Action Plan recommendations
- Number of regulatory decisions and policy directives on the utility, local, state, and regional-level related to utility planning, new/expanded programs, utility ratemaking and revenue requirements, and rate design
- Amount of energy or capacity reduction from new energy efficiency targets, new energy efficiency programs, and new utility planning efforts to incorporate energy efficiency
- Amount of energy or capacity reduction expected and achieved by end-user commitments to save energy
- Amount of new funding targeted to energy efficiency
- Number of complementary policies adopted (with estimated energy savings where available), such as building codes, appliance standards, and tax and other incentives.

How Can You Be Involved?

- Utilize the Action Plan Report in your state
- Make a commitment/s as the Energy Office or in conjunction with fellow state agencies
- Participate in Commission workshops and dockets on the Action Plan issues
- Let us know what you need to help make progress in your state on the Action Plan issues
- Let us know your success stories so we can share them with others



Clean EnergyEnvironment
STATE PARTNERSHIP

The Clean Energy-Environment State Partnership

A voluntary state-federal partnership with leading states to advance clean energy policies that achieve economic, public health, and environmental goals

Partners take action:

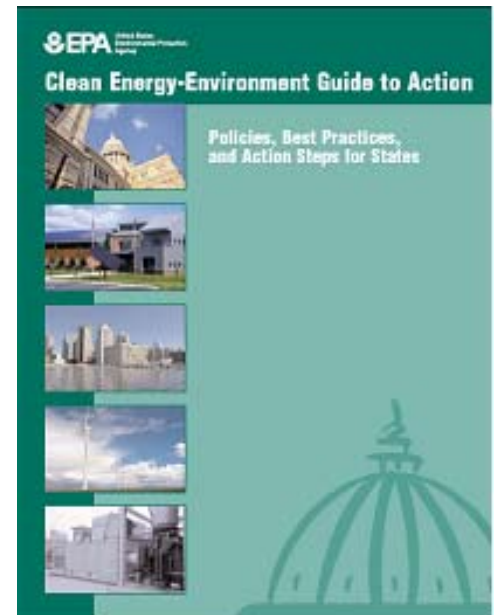
- Foster collaboration among state agencies
- Establish 1 or more clean energy goals
- Conduct analyses, evaluate options and measure benefits
- Develop and implement clean energy-environment action plan

EPA provides:

- Dedicated, hands-on assistance evaluating strategic and programmatic options
- Targeted guidance and analysis
- State-to-state peer exchange and communication support
- Information about funding opportunities and related clean energy resources
- National recognition

EPA Clean Energy-Environment *Guide to Action*

- **The *Clean Energy-Environment Guide to Action* describes 16 cost-effective clean energy policies that states have successfully implemented**
 - Builds on established state models and experiences in designing, implementing, and evaluating clean energy programs.
 - includes specific action steps, best practices and lessons learned
 - Designed to help states develop new clean energy programs or enhance existing ones
- **Designed for use by state energy and environmental policymakers.**
 - Identifies action steps for air and energy officials and utility regulators
 - Describes role of state legislatures, executive branch and other state agencies
 - Includes numerous state examples and federal, state and nonprofit resources
- **Available at www.epa.gov/cleanenergy**



EPA Clean Energy-Environment *Guide to Action*

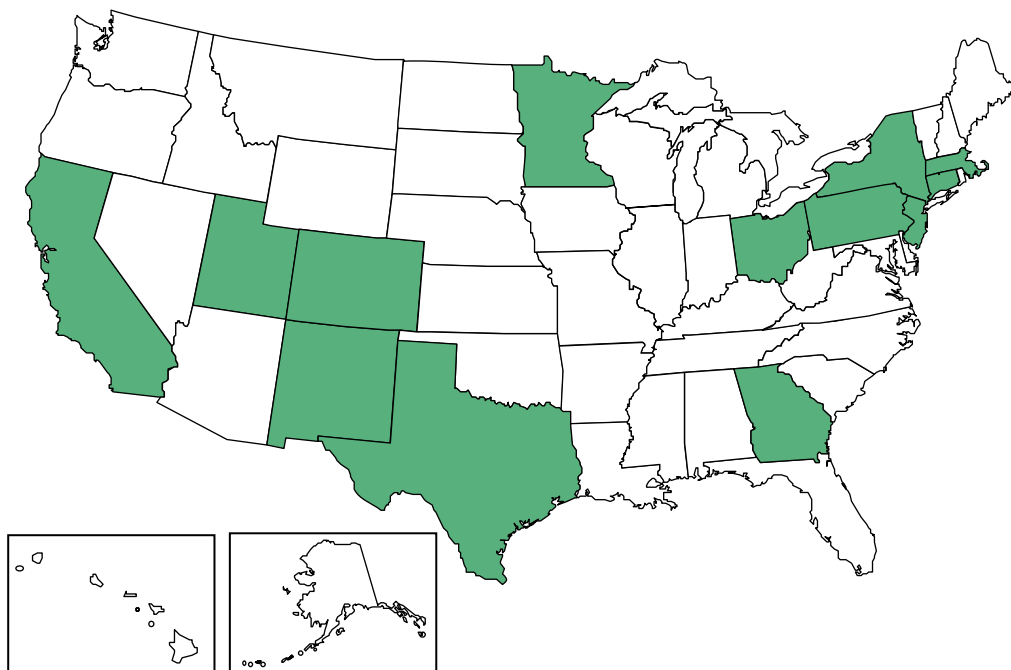
| Policy | EE | RE | DG/CHP |
|---|-----------|-----------|---------------|
| State Planning and Incentive Structures | | | |
| Lead by Example | X | X | X |
| State and Regional Energy Planning | X | X | X |
| Determining the AQ Benefits of Clean Energy | X | X | X |
| Funding and Incentives | X | X | X |
| Energy Efficiency Actions | | | |
| Energy Efficiency Portfolio Standards | X | | |
| Public Benefit Funds for Energy Efficiency | X | | |
| Building Codes for Energy Efficiency | X | | |
| State Appliance Standards | X | | |
| Renewable Energy and Combined Heat and Power | | | |
| Renewable Portfolio Standards | | X | X |
| Public Benefit Funds for Clean Energy Supply | | X | X |
| Output-Based Environmental Regulations | | X | X |
| Interconnection Standards | | X | X |
| Fostering Green Power Markets | | X | X |
| Utility Planning and Incentive Structures | | | |
| Portfolio Management Strategies | X | X | X |
| Utility Incentives for Demand-Side Resources | X | X | X |
| Emerging Approaches: Removing Rate Barriers to Distributed Generation | | X | X |

State Partners

Together, EPA's Partner States Represent...

- 52% of U.S. population
- 48% of U.S. energy consumption
 - 6 of 10 highest energy consuming states
- 55% of total U.S. GSP
- 46% of total U.S. CO₂ emissions from fossil fuel combustion

Participating States (14):
CA, CO, CT, GA, MA, MN, NC,
NJ, NM, NY, OH, PA, TX, UT



For More Information

National Action Plan for Energy Efficiency

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