The Clean Energy-Environment State Partnership Program: Collaborating for Clean Energy & Clean Air

Kathleen Hogan, Director Climate Protection Partnerships Division STAPPA-ALAPCO Fall Membership Meeting October 23, 2005



Outline

- The Time is Right for Clean Energy
- States & Locals are Taking Action and Reaping Benefits
- The Clean Energy-Environment State Partnership
 - About Our Partners
 - What is the State Commitment?
 - What Does EPA Provide?
 - Guide to Action
 - Tools & Analysis
 - What can this mean for Municipal Governments?
- Summary & Next Steps



Why Clean Energy Now?

Factors converging in favor of clean energy:

- Energy Markets
- Air Quality
- Electricity Policy
- Climate Policy

<u>Clean energy</u> = cost-effective energy efficiency, renewables, and clean distributed generation such as combined heat and power.



States are talking the talk...(1)

- By reducing our dependence on foreign energy sources we can [not only] stop sending our energy dollars to unstable parts of the world, but we can become a world leader in clean energy technologies, from wind and solar power to geothermal and fuel cells.
- New York Governor Pataki's 2004 State of the State





States are talking the talk...(2)

- Utilizing homegrown renewable fuels is good for our farmers, it's good for rural economic development, it's good for national security, and it's good for the environment. I would much rather have the fuel in our cars come from the Midwest than from the Middle East. Let's make [our state] the Saudi Arabia of Renewable Fuels.
- Minnesota Governor Pawlenty's 2005 State of the State





States are talking the talk...(3)

- ...we share the goals to build energy capacity, reduce our dependence on foreign oil, keep our environment clean, and create high-wage jobs in the energy industry.
- New Mexico Governor Richardson's 2005 State of the State



States are talking the talk...(4)

I intend to show the world that economic growth and the environment can coexist.

 California – Governor Schwarzenegger's 2004 State of the State





....Walking the Walk...

Examples of State experience with clean energy policies:

EE and other demand-side measures

- > 7 states have EE portfolio standards (direct or indirect)
- > 10 states have appliance standards complete or in progress

Energy supply measures

- > 22 states with renewable portfolio standards (RPS)
- 15 states have standard interconnection rules for DG
- 12 states have output-based emission regulations

Financial strategies

SEPA

- > 18 states have EE public benefits funds, 15 for clean supply
- Power market rules and regulations
 - Multiple states pursuing: decoupling utility profits from sales, portfolio management, integrated resource planning, and incorporating clean energy into transmission and reliability planning EnergyEnvironment

8

... and Reaping Multiple Benefits

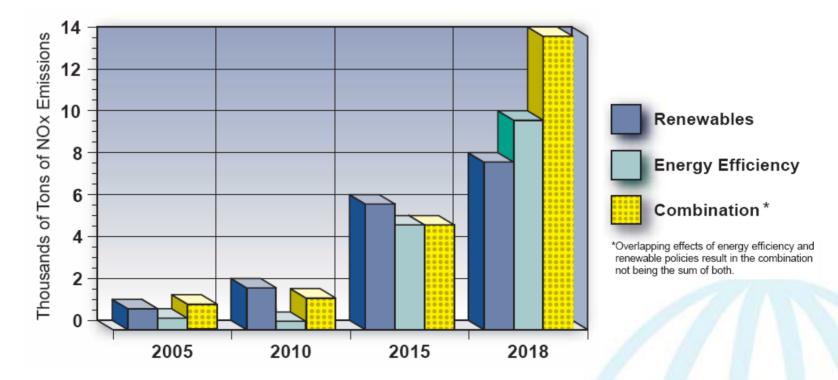
- Environmental and health benefits include reducing emissions of air pollutants and greenhouse gases that pose risks to public health and the environment
- Energy benefits include reducing energy demand, stabilizing energy prices, improving electric system reliability, and promoting energy independence
- Economic benefits include job creation and lower total energy costs for consumers, who currently spend \$700 billion each year on energy bills





Clean Energy Improves Air Quality...

Potential NO_x Reductions from EE and RE in WRAP States*

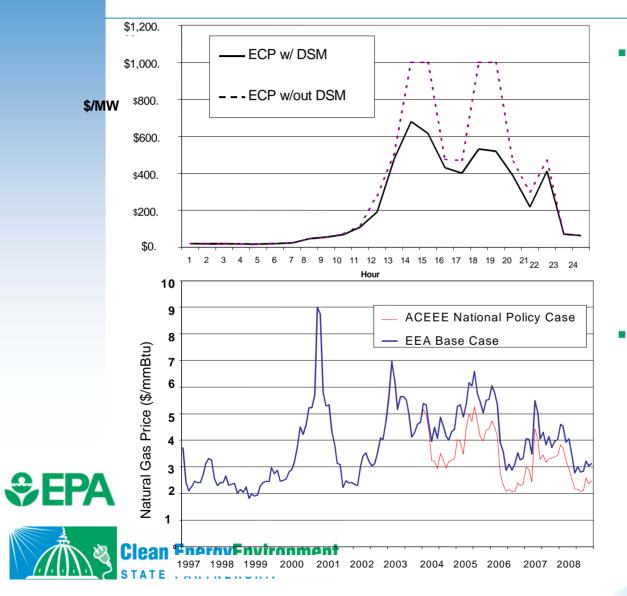




WRAP States are: Alaska, Arizona, California, Colorado, Idaho, Montana, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming



...and Lowers Energy Prices



- DSM programs reduced price of peak power by 30 to 40%
 - Impact of Massachusetts DSM on Spot Market Clearing Price, June 7, 1999 (NEDRI Final Report, July 2003)

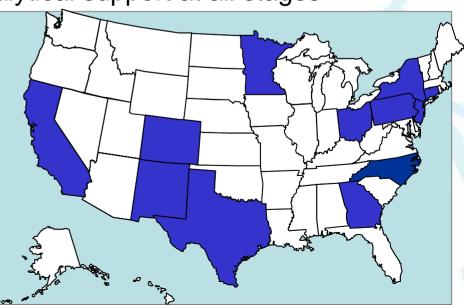
- Strong EE/RE Programs could reduce gas prices
 - 2-4% reduction in demand reduces prices by 20% and reduces air emissions

The Clean Energy-Environment State Partnership Makes the Connections

- A voluntary state-federal partnership with leading states:
 - Develop cost-effective clean energy resources
 - > Achieve economic, public health, environmental goals
 - Inform other energy-environment policies
- The Partnership provides a platform for promoting clean energy policies
- EPA provides hands on analytical support at all stages

Participating States: CA, CO, CT, GA, MN, NC, NJ, NM, NY, OH, PA, TX





About Our Partners

Together, EPA's 12 Partner States Represent...

- 46% of total U.S. energy consumption
 - 6 of 10 highest ranked states by overall energy consumption (TX, CA, NY, OH, PA, GA)
- 44% of total U.S. GHG emissions from fossil fuel combustion
- 49% of total U.S. population
- 51% of total U.S. GSP
- 50%+ of both ozone (8hr) and PM 2.5 non-attainment counties

Each Partner State Presents Unique Challenges and Opportunities

- CO gets 81% of its electricity from coal, compared with 52% nationally
- TX and CA are the two highest GHG emitters in the US
- **SEPA** NJ has highest population density in US (13X national average)



Clean Energy-Environment State Partnership – Key Program Elements

Partners take action:

- Sign MOU with EPA
- Foster <u>collaboration</u> among state agencies
- Establish 1 or more <u>clean energy goals</u>
- Conduct analyses, evaluate options and measure benefits
- Develop and implement clean energy-environment <u>action plan</u>

EPA provides:

- Access to tools, analysis and expertise
- Clean Energy-Environment Guide to Action
- State-to-state peer exchange and communication support
- Information about funding opportunities and related clean energy resources
- National recognition

Clean EnergyEnvironment

EPA Resources for States – The "Guide to Action"

- Contains descriptions, lessons learned, links to resources for 16 "Best Practice" Clean Energy policies:
 - State Opportunities to Support Clean Energy
 - Energy planning, funding and incentives, lead by example, environmental benefits of clean energy
 - Energy efficiency
 - EE portfolio standards, public benefit funds, building codes, appliance standards
 - Energy supply
 - RE portfolio standards, public benefit funds, interconnection, output-based standards, green power, utility rates
 - Utility Planning
 - Decoupling and utility incentives, portfolio management



SEPA

Release Date: November, 2005

EPA Resources for States – Tools, Analysis, Expertise, Peer Exchange, Federal Resources

Tools and Analyses Helps States...

(1) Understand State Emissions:

- State GHG Inventory Tool
- STAPPA ALAPCO Clean Air and Climate Protection Software

(2) Evaluate Clean Energy Policy Options:

- Clean Energy potential studies
- CACPS Policy Assessment Module
- SEP Toolkit
- SIP Guidance for EE/RE Actions
- Access to Economic Models
- Co-Benefits Risk Assessment (COBRA)
- Mitigation Impact Screening Tool (MIST)

SEPA (3) Make Informed Policy Decisions



EPA Resources for States – Tools, Analysis, Peer Exchange, Federal Resources

State-to-State Peer Exchange ...

EE/RE State Technical Forums

Conferences and training sessions

Reports and white-papers

Leveraging Federal Resources

- CPPD partnerships
 - Green Power CT
 - Change a Light Partner states
- DOE alignments
 - Clean Energy training 3 Partner trainings, thus far
 - Building Code Assistance Project hands on training, keyed to partner states



EPA Resources for States – Linking to Related Partnership Programs



ENERGY STAR®

EPA-DOE program that offers organizations energy efficient solutions to save money while protecting the environment



Green Power Partnership

Voluntary program that boosts the market for clean, RE power sources



CHP Partnership Program

EPA COMBINED HEAT AND POWER PARTNERSHIP

Partnership that reduces the environmental impact of electricity generation by fostering CHP development





Examples of State Partnership Actions

Georgia

energy and air collaborative meets monthly-have identified 5 key actions and are primed to provide input to state energy plan

Texas

formalizing additional agency participation, identified 3 clean energy priorities

Ohio

identified building code training and enforcement as key opportunity, assessing other low hanging fruit, working to help implement NO_x set aside

Connecticut

refining and analyzing options identified in state climate action plan



Expanding to Municipal Governments

Two Fold Approach:

- Encourage States to work more closely with their local governments
 - Funding/incentives
 - Education
 - Recognition
- Establish a more comprehensive method for EPA to support clean energy development at the municipal level
 - Parallels to State Partnership
 - Continue and expand peer exchange among local governments





Summary & Next Steps

Clean energy is a critical resource

- EE, RE energy, and clean DG
- > Multiple benefits: Environment, Energy, Economic

The time is right for clean energy

- Factors converging in favor of clean energy
- Integration of energy-AQ strategies, collaboration among state agencies both key
- EPA's new Clean Energy-Environment State Partnership helping implement and determine the best policies

Next:

Sepa

- Formalize collaboratives
- Assess options and develop clean energy policies
- Determine best, most cost-effective approaches
- Engage municipal governments

Clean EnergyEnvironment

For More Information

How Do I Get More Information?

 For more information about EPA's State Clean Energy-Environment Partnership Program contact: Julie Rosenberg, Chief State and Local Branch phone: 202-343-9154 e-mail: <u>Rosenberg.Julie@epa.gov</u>

Web site:

www.epa.gov/cleanenergy/stateandlocal/partners.htm

- For general information about clean energy, visit EPA's Clean Energy Web site:
 - http://www.epa.gov/cleanenergy

STATE PARTNERSHIP