

**NASEO**

**National**

**Association**

**of State Energy Officials**

**ENERGY'S WASHINGTON VOICE**

# Leading by Example

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## State Energy Office Efficiency Programs and Policies

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# STATE ENERGY OFFICES AND PARTNERS

## Labs for New Policies and Programs

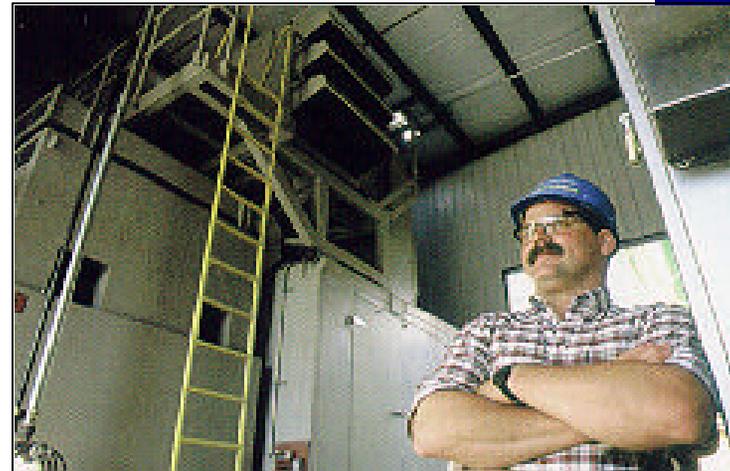
- Nexus of energy, environment, and transportation
- Leading by example with public facilities efficiency
- State-federal partnerships

## ENERGY, ENVIRONMENT, AND TRANSPORTATION

- National coordination among NARUC, ECOS, NASEO, and others
- Pilot policies and programs to meet energy and environmental goals
  - Texas, Georgia
- Sustainable Development
  - Oregon

## Oregon Business Energy Tax Credit Program for Sustainable Development

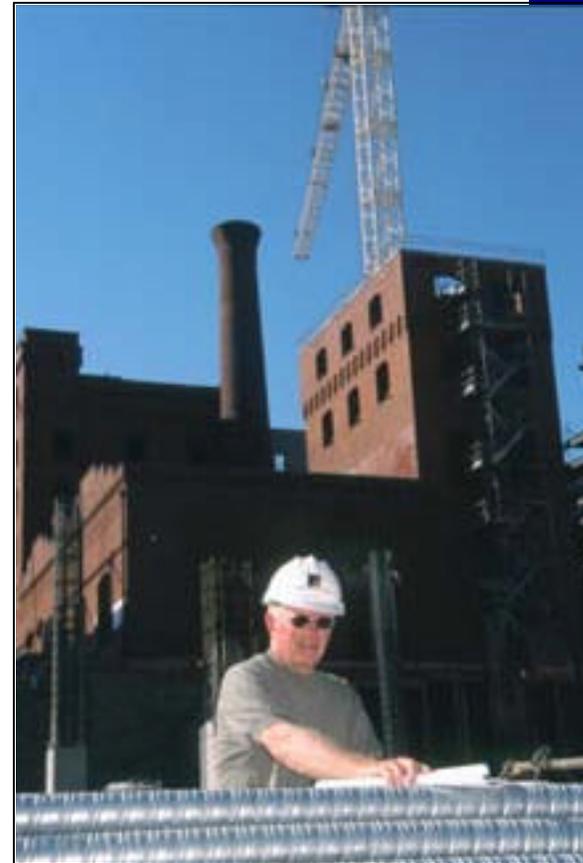
- Began in 1980
- 6,475 tax credits issues
- Total project cost of about \$550 million
- Projects save or generate energy worth over \$100 million per year



# ENERGY, ENVIRONMENT, AND TRANSPORTATION

## Oregon Tax Credit Eligibility:

- Project must involve energy efficiency, recycling, or renewable resources
- Provides a tax credit up to 35% of eligible project cost
- Tax credit is taken over 5-year period (or 1-year if under \$20,000 in eligible costs)



# ENERGY, ENVIRONMENT, AND TRANSPORTATION

- Oregon Tax credit based on LEED certification - existing, recognized national program
- LEED easily adapted to tax credit and requires minimal staff
- Oregon requires application **BEFORE** project begins
- Building must receive silver, gold or platinum rating and minimum 1 energy point, 1 commissioning point
- Eligible costs based on the building square footage



## ENERGY, ENVIRONMENT, AND TRANSPORTATION

- **Ecotrust's Natural Capital Center (Portland, OR)**

70,000 square feet

First 10,000 sq. ft. @ \$9.29 = \$ 92,900

Next 40,000 sq. ft. @ \$4.29 = \$171,600

Next 20,000 sq. ft. @ \$2.86 = \$ 57,200

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Total in eligible costs = \$321,700

- **35% of eligible costs = \$112,595 tax credit**

# LEADING BY EXAMPLE

## Energy Efficient Government Facilities

- Budget concerns a catalyst for efforts to improve efficiency in state local facilities
  - e.g., Kansas, Maryland, Texas, Hawaii, Oregon
- Load reduction strategies and incentives
- Renewable portfolio standards, incentives, green power purchasing requirements
  - e.g., Texas
- Adoption of new building codes, improved implementation

## STATE-FEDERAL PROGRAMS AND PARTNERSHIPS

- Increase State Energy Office Energy Star product and promotion efforts
- Cooperative research, development, demonstration, deployment
- SEP: state direction of cost-shared resources to meet national goals

## ORNL's SEP ENERGY AND COST SAVINGS REPORT



### **\$1 in SEP Funding Yields:**

- \$7.23 in annual energy cost savings
- 1.17 million source BTUs saved
- \$3.54 in “leveraged” funding from the State and private sector (not including public benefits funds)

# STATE ENERGY PROGRAM

## Total Annual Emission Reductions

Carbon	719,251.8 metric tons
VOCs	127.2 metric tons
NOx	5,739.0 metric tons
PM <sub>10</sub>	144.8 metric tons
SO <sub>2</sub>	7,655.7 metric tons
CO	968.7 metric tons

# TEXAS

## GreenSTAR Program

### Objectives and Goals:

• Reducing building energy consumption  
• Reducing owners' energy costs through  
• Operation of public buildings

### Program Activity:

• Revolving loan program financing  
• Energy efficiency projects for State  
agencies, colleges and universities,  
school districts, county hospitals and  
local governments



- Legislature mandated capitalization of \$95 million, minimum
- Loans repaid from cost savings generated by funded projects
- 144 loans totaling over \$164 million

# TEXAS



## LoanSTAR Program

### Energy Savings

Energy savings exceed 18 million MMBTUs = electricity use of 440,000 homes for a year

- ✍ Total energy cost savings top \$125 million
- ✍ Projected energy savings to surpass \$500 million, over the next 20 years

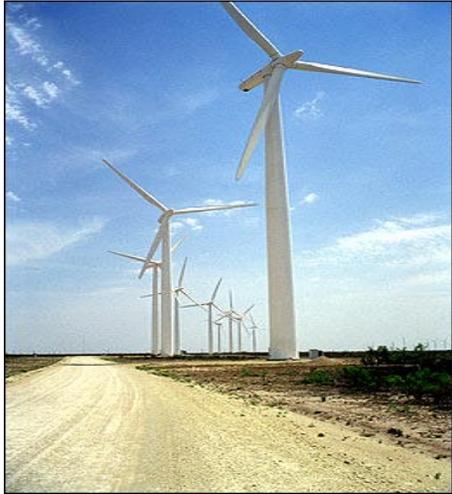
- **Carbon Emissions**
  - ✍ CO<sub>2</sub> – 2,235 tons
  - ✍ SO<sub>2</sub> – 76 tons
  - ✍ NOx – 4,699 tons

# NEW MEXICO

## Wind Energy Program

### Purpose and Goals:

- Develop commercial wind power in New Mexico
- Produce clean, affordable electricity for New Mexicans



### Program

- **Wind Resource Assessment and Monitoring - \$210,500**
  - ✍ 6 of the most promising sites selected for intense monitoring
  - ✍ All 6 determined to have significant commercial potential
- **Economic Impact Studies - \$50,000**
  - ✍ Detailed economic benefits of wind power to 5 counties
- **Wind Development Guide/Case Study - \$150,000**
  - ✍ Step-by-step guidance documents for wind development in New Mexico

# NEW MEXICO

## Wind Energy Program



Results:

### Energy Savings

Wind power will offset some of State's  
% fossil-fired power generation

### Leasing

- ✍ \$400,00 in SEP funds garner nearly \$90 million in State incentives for wind projects

Wind capacity scheduled on line by end of 2003

Public policy incentives resulting from Wind Energy

### Renewable Energy Production Tax Credit

- \$0.01/kWh provides \$8million/yr for 10 years \$80 million (maximum)

### Industrial Revenue Bond Financing of Wind Projects

- Lower interest rates and exemption from Gross Receipts Tax for wind equipment \$7 million (minimum)

### Renewable Portfolio Standard

- Effective July 1, 2003, 10% by 2011
- Wind Program instrumental in getting legislation passed

# CALIFORNIA

## Builder Energy Code Training

### Objective and Goals:

Improve energy through energy code training for large production builders

Increased compliance with California's Residential Building Energy Efficiency Standards (Title 24)



- Improved energy efficiency in quality energy-related construction practices (e.g., insulation, space conditioning, plumbing, etc.)
- More than 1,000 builder companies and 3,000 builder and local building department staff have participated
- Prior to the program, new homes complied with the standards only 15% of the time. Following training, participating builders were in compliance 77% of the time
- Approximately 125,000 new homes have directly benefited

## STATE ENERGY PROGRAM

### SEP Program Benefits are Even Greater...

- ORNL report quantifies benefits of 14 SEP program areas, representing about 60% of funding
- Not addressed by report are benefits related to:
  - energy emergency planning and preparedness,
  - State Energy Office involvement in public- and private-sector energy policy and program plan development