

Weatherization and Intergovernmental Program

Program Mission

The mission of the Weatherization and Intergovernmental Program is to develop, promote, and accelerate the adoption of energy efficiency, renewable energy, and oil displacement technologies and practices by a wide range of customers, including State and local governments, weatherization agencies, communities, companies, fleet managers, building code officials, technology developers, Native American tribal governments, and international agencies.

The Weatherization and Intergovernmental Program funds activities that facilitate the movement of energy efficient and renewable energy products into the marketplace and helps match new energy technologies to markets for energy products and services, based on the needs and choices of State agencies and others responsible for determining how local needs are met.

Strategic Context

The Weatherization and Intergovernmental Program activities support the President's National Energy Policy (NEP) recommendations for rapid deployment of clean energy technologies and energy efficient products. The program addresses the Presidential commitment to increase funding for the Low Income Weatherization Assistance Program, which improves the energy efficiency of dwellings occupied by low-income Americans, by \$1.4 billion over ten years.

Technical and financial assistance to States, local governments and communities addresses National Energy Policy recommendations to: expand the Energy Star Program to schools, retail buildings, health care facilities, and homes; and to support collaborative research, development, and field testing for energy efficient technologies. The international component of the program supports energy firms competing in foreign markets, supports activities that reduce barriers to trade and investment, and focuses on emerging energy issues and clean energy market development.

Management Strategy

The Weatherization and Intergovernmental Program is comprised of grant- and deployment related activities previously located within different program offices. This consolidation responded to a recommendation in the Strategic Program Review (SPR), which identified a need to strengthen the analytical underpinnings of market transformation programs.

The Weatherization and Intergovernmental Program is working within the reorganized EERE to establish sound criteria for engaging in particular programs. Additionally, the program is enhancing indicators of progress, metrics for success, and methods of graduating efforts to the public, non-profit, and private sectors. These efforts are designed to improve Department of Energy effectiveness in facilitating the deployment of efficient and renewable energy technologies, streamline the management of competitive awards, and allow for more efficient administration of program funding. In addition, the program invests in technical program and market analysis and performance assessment in order to direct effective strategic planning. Taken as a group, the organization of activities within this Program are

established to address NEP observations regarding implementation obstacles by providing the American public and international entities with an integrated deployment approach to convey decisional information to help remove technical, financial, and availability hurdles. The combination of activities under one program provides a cohesive process for delivery and management by lower-level subprogram elements that focus on energy technology applications for buildings, transportation, and industrial markets.

The program receives appropriations from both the Interior and Related Agencies and Energy and Water Development subcommittees. Interior activities focus on Weatherization Assistance and State Energy Programs. Energy and Water Development activities focus on renewable energy support and implementation. The activities of the program are organized as follows:

- Weatherization (Interior)
 - Weatherization Assistance
 - Training and Technical Assistance
- State Energy Assistance (Interior)
- State Energy Activities (Interior)
 - Cooperative Activities with States - Industry (Program Closeout Only)
 - Planning/Evaluation for State Activities
- Gateway Deployment (Interior)
 - Rebuild America
 - Energy Efficiency Information and Outreach
 - Building Codes Training and Assistance
 - Clean Cities
 - Energy Star
 - National Industrial Competitiveness through Energy, Environment, and Economics NICE³) (Program Closeout Only)
 - Inventions and Innovations
 - International Market Development
 - Technical/Program Management Support
- Intergovernmental Activities (Energy and Water Development)
 - International Renewable Energy
 - Tribal Energy Activities

Budget and Performance Integration

To implement the budget and performance integration portion of the **President's Management Agenda** the Weatherization Assistance Program participated in the OMB Program Assessment Rating Tool (PART) process in both its pilot and in this year's review. PART criteria were used to guide program budget planning, management review and performance goals and targets. In response to the FY 04 PART assessment the Weatherization Assistance Program is working to address and achieve its recommendations, specifically:

- The Weatherization Assistance Program currently conducts periodic metaevaluations of national program performance based on State-level program evaluations and generates national benefit/cost ratios based on the metaevaluation results. The most recent metaevaluation results were made available to program management for review in October 2002, as the results are finalized the cost-benefit will be incorporated in the performance indicator. In addition the Program conducts ongoing evaluation of various program elements such as its standard and advanced hot climate field studies now underway in Texas.
 - Program Management is undertaking the preliminary work needed for conducting another comprehensive national evaluation of the program but given the cost and priority on weatherizing homes, can only do so with specific Congressional authorization. The Program works with Oak Ridge National Laboratory to insure the validity of the evaluations results.
 - The program strongly supports State efforts to perform cost effectiveness evaluation of State weatherization activities, including authorizing the use of their technical assistance funds to conduct evaluation, but cannot require individual States to do so. Sixteen States have conducted 37 evaluations since 1992 that provide a picture of program performance from diverse programs around the country. The national office partners with the States to develop and conduct cooperative evaluations of State performance that address national and State assessment issues as budgets permit.

Program Benefits

The Weatherization and Intergovernmental Program (WIP) encompasses a broad range of activities in virtually all demand sectors of the energy economy. These activities generally are comprised of market enhancement activities, rather than research and development, and broadly cover all energy markets. They provide a wide range of benefits: the Low Income Weatherization Assistance Program, for instance, improves energy affordability for lower-income households who could not otherwise afford these improvements. The State Energy Program (SEP) grants, among many other activities, fund the development and maintenance of energy emergency planning at the State and local levels, a critical security benefit.

FY 2004 GPRA Benefits Estimates for WIP (NEMS-GPRA04)			
	2005	2010	2020
Displaced Capacity (GW)	0.1	1.1	21.2
Non-Renewable Energy Savings (quads)	0.14	0.68	1.42
Oil Savings (quads)	0.02	0.14	0.60
Carbon Savings (MMT)	2.5	8.9	26.3
Energy Expenditure Savings (B2000\$)	1.5	6.0	14.7

EERE does not currently quantify most of these types of benefits. It does estimate the energy savings associated with accelerated adoption of energy efficient technologies and practices through

Weatherization & Intergovernmental program activities.^a About 1.4 quads of energy savings, associated with \$14.7 billion in reduced energy bills, are expected annually by 2020 as a result of program efforts over the next 15 years. These estimates do not include savings from international activities, which are currently outside the scope of the integrated modeling framework. The Native American renewable initiative is also not being modeled for this year.

Weatherization, State and Community grants, and NICE3 lead to greater adoption of energy efficiency largely in proportion to the size of the effort. Weatherization grants are represented in NEMS-GPRA04 by reducing energy consumption in the residential sector based on the number of households reached and typical savings per household. State and Community grants reductions are based on typical reported activities. A similar program-specified reduction in energy use is implemented in the industrial sector for the NICE3 program. The Clean Cities program is represented through improved CNG technology and greater consumer acceptance of CNG vehicles. It is modeled in conjunction with the FreedomCAR & Vehicle Technologies Program, and then the savings from CNG vehicles are allocated to WIP. The CNG vehicles are used a proxy for all alternative vehicles that are not part of the FreedomCAR or Hydrogen Programs.

The Inventions and Innovation program is comprised of many individual grants for different technologies. Those in the industrial sector were treated in the same manner as the NICE3 through exogenous reductions in energy usage. The technologies with the largest expected benefits (aluminum head diesel engines for SUVs, high efficiency incandescent light bulbs, high efficiency air conditioners, and more efficient motors for air conditioners) were estimated with assistance from the I&I program contractors and included in NEMS-GPRA04. The diesel engines were modeled as incremental to the FreedomCAR Program.

The Energy Star components of Gateway Deployment are represented by modifying the consumer behavior coefficients indicating how consumers trade-off first cost expenditures with annual energy savings, based on program goals for market penetration. The building codes activities are modeled under the Buildings program, with a fraction based on program office estimates allocated to WIP.

Program Strategic Performance Goals

The Program Strategic Performance Goals represent the Weatherization and Intergovernmental Program in entirety, and thus encompasses efforts under both the Energy and Water Appropriation and the Interior Appropriation:

The Weatherization and Intergovernmental Program has the following overall performance goals: 1) from 2003 to 2011, complete weatherization upgrades for a total of 1.2 million low income households; 2) by 2008, award cumulative total of 280 grants to 56 States and Territories; 3) cumulatively for the years 2003 through 2007, complete 15 or more State collaborative industrial research, development, and field testing cooperative agreements; 4) from 2003 to 2007, provide

^a Benefits are annual, not cumulative, for the year given for the entire program (Interior and EWD portions). Estimates reflect the benefits associated with program activities from FY 2004 to the benefit year or to program completion (whichever is nearer), and are based on program goals developed in alignment with assumptions in the President's Budget.

technical assistance to facilitate Rebuild America partners' retrofitting of an additional 280 million square feet of commercial and public/institutional space, with average efficiency improvement of 18 percent; 5) from 2003 through 2007, provide access to energy efficiency information for 20 million consumer contacts ; 6) by 2008, facilitate adoption of upgraded model residential and commercial building energy codes (10 percent improvement) in 20 additional States, and by 2008, train 10,000 architects, engineers, builders and code officials to use and enforce upgraded energy codes; 7) By 2007, work with Clean Cities coalitions to increase the number of alternative fuel vehicles (AFV's) from 110,000 in 2001, to 233,000 in 2007, and 383,000 in 2010, leveraging an outcome of 983,000 AFV's, consuming one billion gallons of alternative fuel by 2010; 8) from 2001 to 2010, increase the market share for ENERGY STAR windows from 25 to 55 percent, and market share for ENERGY STAR appliances from 15 to 22 percent; 9) closeout NICE³ 10) from 2003 to 2008, competitively fund 75 or more inventors and small businesses to develop energy efficiency technologies; 11) complete closeout of International Market Development initiated in 2003; 12) support to the maximum extent practicable DOE international goals and specific commitments contained in bilateral and multilateral agreements; and support the Clean Energy Technology Exports (CETE) initiative for joint public-private cooperation to increase the export of U.S. products and services; and 13) from 2003 to 2008, fund technical assistance to Native American Tribes in support of 50 or more economic development projects, 15 or more feasibility studies, and 15 or more workshops to promote energy efficiency and renewable energy resource development on Tribal lands.

Performance Indicators for Weatherization and Intergovernmental Programs

(Broken down by PSPG Sub-goal)

(1) Weatherization Assistance – From 2003 to 2011, complete weatherization upgrades for a total of 1.2 million low income households.

Performance Indicators

Number of homes weatherized. Amount of leveraged funds for weatherization from other sources. Program benefit-cost ratio.

Annual Performance Results and Targets

FY 2002 Target	FY 2003 Target	FY 2004 Proposed Target
Weatherized 105,000 homes, with DOE funds.	Weatherize 123,000 homes, with DOE funds. ^{ab}	Weatherize 126,000 homes, with DOE funds.

^a The annual number of homes weatherized is based on DOE contributions, the cumulative total includes homes weatherized with DOE and leveraged funds.

^b Homes weatherized results/target based on States' program years not the Federal fiscal year.

Cumulative total of 5.1 million homes weatherized with DOE and leveraged funds.

Cumulative total of 5.2 million homes will be weatherized with DOE and leveraged funds.

Cumulative total of 5.3 million homes will be weatherized with DOE and leveraged funds.

(2) State Energy Program – By 2008, award cumulative total of 280 grants to 56 States and Territories.^a

Performance Indicators

Number of States that have developed State energy plans in collaboration with State Energy, environmental, and economic offices. Number of States that have developed State energy emergency plans.

Annual Performance Results and Targets

FY 2002 Results	FY 2003 Target	FY 2004 Proposed Target
<p>Awarded \$45,000,000 in grants to 56 States and Territories to support planning and implementation of statewide energy programs to address their individual energy situations while contributing to the achievement of national energy goals.</p>	<p>Award \$38,798,000 in grants to 56 States and Territories to support planning and implementation of statewide energy programs to address their individual energy situations while contributing to the achievement of national energy goals.</p>	<p>Award \$38,798,000 in grants to 56 States and Territories to support planning and implementation of approved statewide energy programs to address their individual energy situations while contributing to the achievement of national energy goals.</p>
<p>Pursuant to the SEP Strategic Plan for the 21st Century, provide technical assistance to 56 States and Territories to strengthen the State Energy Office network.</p>	<p>Pursuant to the SEP Strategic Plan for the 21st Century, provide technical assistance to 56 States and Territories to strengthen the State Energy Office network.</p>	<p>Pursuant to the SEP Strategic Plan for the 21st Century, provide technical assistance to 56 States and Territories to strengthen the State Energy Office network.</p>

(3) State Energy Activities -- Cumulatively for the years 2003 through 2007, complete 15 or more State collaborative industrial research, development, and field testing cooperative agreements.

^a OMB's FY 2004 PART review identified the need for improved performance measures, and the program is working with OMB to develop measures which better capture the intent of budget and performance review integration for inclusion in the FY 2005 budget.

Performance Indicators

Number of collaborative industrial research, development, and deployment activities among States, universities, industry, and others.

Annual Performance Results and Targets

FY 2002 Results	FY 2003 Target	FY 2004 Proposed Target
Continued the activities funded in FY 2001.	Provide cooperative agreements to 3-6 States for collaborative industrial research, development, and field testing.	Closeout Cooperative Agreement with States for industrial research and development.
Evaluated and improved SEP performance and planning in support of the State Energy Office network.	Evaluate and improve the performance and planning in support of the State Energy Office network.	Evaluate and improve the performance and planning in support of the State Energy Office network.

Gateway Deployment

(4) Rebuild America -- From 2003 to 2007, provide technical assistance to facilitate Rebuild America partners' retrofitting of an additional 280 million square feet of commercial and public/institutional space, with average efficiency improvement of 18 percent.

Number of Rebuild partnerships. Millions of square feet of buildings projects planned. Number of planned building projects.

Annual Performance Results and Targets

FY 2002 Results	FY 2003 Target	FY 2004 Proposed Target
Established 40 new <i>Rebuild America</i> community partnerships and assisted these communities to retrofit 80 million square feet of floor space in K-12 schools, colleges, public housing, State and local governments.	Assist over 450 new and existing <i>Rebuild America</i> community partnerships upgrade 80 million square feet of floor space in K-12 schools, college, public housing, and State/local governments.	Assist over 500 new and existing <i>Rebuild America</i> community partnerships upgrade 70 million square feet of floor space in K-12 schools, colleges, public housing, and State/local governments.

(5) Energy Efficiency Information and Outreach -- From 2003 through 2007, provide access to energy efficiency information for 20 million consumer contacts.

Performance Indicators

Number of visits by consumers to WIG internet pages. Number of consumers assisted through information clearinghouse (EREC). Number of direct mail and newsletter pieces distributed.

Annual Performance Results and Targets

FY 2002 Results	FY 2003 Target	FY 2004 Proposed Target
3,500,000 hits on WIG internet pages.	3,800,000 hits on WIG internet pages.	3,800,000 hits on WIG internet pages.
58,000 consumers were assisted through the information clearinghouse (EREC).	Assist 64,000 consumers through information clearinghouse (EREC).	Assist 40,000 consumers through information clearinghouse (EREC).
118,000 direct mail and newsletter pieces were distributed.	Distribute 120,000 direct mail and newsletter pieces.	Target 80,000 direct mail and newsletter pieces to priority markets.

(6) Building Codes Training and Assistance – by 2008, facilitate adoption of upgraded model residential and commercial building energy codes (10 percent improvement) in 20 additional States, and by 2008, train 10,000 architects, engineers, builders and code officials to use and enforce upgraded energy codes.

Performance Indicators

Number of States adopting upgraded model building energy codes. Number of people trained in code compliance and enforcement.

Annual Performance Results and Targets

FY 2002 Results	FY 2003 Target	FY 2004 Proposed Target
4 States adopted upgraded 1999 and 2000 model commercial or residential building energy codes.	4 States will adopt upgraded 2001 and 2003 model commercial or residential building energy codes.	4 States will adopt upgraded 2001 and 2003 model commercial or residential building energy codes.
Trained over 4,000 architects, engineers, builders and code officials on the 2000 IECC and Standard 90.1-1999.	Train 2,000 architects, engineers, builders and code officials on the upgraded 2003 IECC and Standard 90.1-2001.	Train 2,000 architects, engineers, builders and code officials on the 2003 IECC and Standard 90.1-2001 and upgraded 2004 edition.

(7) Clean Cities -- By 2007, work with Clean Cities coalitions to increase the number of

alternative fuel vehicles (AFV's) from 110,000 in 2001, to 233,000 in 2007, and 383,000 in 2010, leveraging an outcome of 983,000 AFV's, consuming one billion gallons of alternative fuel by 2010.

Performance Indicators

Number of alternative fuel vehicles (AFV's) operated by Clean Cities partners. Number of Clean Cities coalitions that become operationally sustaining organizations.

Annual Performance Results and Targets

FY 2002 Results	FY 2003 Target	FY 2004 Proposed Target
135,000 alternative fuel vehicles (AFV's) in operation in Clean Cities.	157,000 alternative fuel vehicles (AFV's) in operation in Clean Cities.	167,000 alternative fuel vehicles (AFV's) in operation in Clean Cities.
30 coalitions are self-sustaining.	40 coalitions are self-sustaining.	40 coalitions are self-sustaining.

(8) Energy Star – From 2001 to 2010, increase the market share for ENERGY STAR windows from 25 to 55 percent, and market share for ENERGY STAR appliances from 15 to 22 percent.

Performance Indicators

Number of partnerships for increasing market share of Energy Star appliances, windows and lighting products. Number of Energy Star qualified products.

Annual Performance Results and Targets

FY 2002 Results	FY 2003 Target	FY 2004 Proposed Target
Recruited 500 additional retail stores, 5 additional utilities and 3 additional manufacturers bringing the total number of stores marketing ENERGY STAR appliances to 7,000.	Recruit 500 additional retail stores, 5 additional utilities and 10 additional manufacturers. Complete draft domestic hot water heaters specification. Begin work on a Commercial Window specification.	Recruit 500 additional retail stores, 5 additional utilities and 10 additional manufacturers. Add domestic hot water heaters to the program.

(9) NICE³ – NICE³ will transition from technology demonstration in FY 2003 to successful program closeout in FY 2004.

Performance Indicators

Number of industry partnerships formed. Steps toward program closeout.

Annual Performance Results and Targets

FY 2002 Results	FY 2003 Target	FY 2004 Proposed Target
<p>Provided incremental funding to 8 State/industry partnerships for the initial demonstration of energy efficiency technologies, which will facilitate their use in other industrial facilities.</p>	<p>Provide incremental funding to 8 State/industry partnerships for the initial demonstration of energy efficiency technologies, which will facilitate their use in other industrial facilities.</p>	<p>Complete program closeout initiated in FY 2003.</p>
<p>Initiated the demonstration of a high efficiency adjustable speed drive coupling system to reduce energy costs by as much as 40 percent or more for motor driven systems in industry</p>	<p>Demonstrate a particle shearing device in the forest products industry that will save 1.71 million KWh annually by 2010</p>	
<p>† Initiated the demonstration of a high temperature, corrosion resistant recuperator that will realize a 20-30 percent energy savings over conventional technology.</p>	<p>Initiate the testing of a lost foam casting process that will save 2.3 trillion Btu by 2010.</p>	

(10) Inventions and Innovation — From 2003 to 2008, competitively fund 75 or more inventors and small businesses to develop energy efficiency technologies.

Performance Indicators

Number of awards to inventors and small businesses.

Annual Performance Results and Targets

FY 2002 Results	FY 2003 Target	FY 2004 Proposed Target
<p>Provided incremental funding to 20 inventors and small businesses to develop their meritorious energy efficiency</p>	<p>Provide incremental funding to 20 inventors and small businesses to develop their meritorious energy efficiency</p>	<p>Provide leveraged initial funding to 20 inventors and small businesses to develop their meritorious energy</p>

FY 2002 Results	FY 2003 Target	FY 2004 Proposed Target
<p>technologies. Tested an efficient and environmentally benign technology for papermaking to potentially reduce electrical energy for papermaking by up to 30 percent and also improve paper quality. Tested an industrial fuel cell micro-generator that will save 2.1 trillion Btu by 2010.</p>	<p>technologies. Demonstrate an efficient and environmentally benign technology for papermaking to potentially reduce electrical energy for papermaking by up to 30 percent and also improve paper quality. Demonstrate industrial fuel cell micro-generator that will save 2.1 trillion Btu by 2010.</p>	<p>efficiency technologies. Demonstrate an innovative method for regenerating spent hydrochloric acid from steel pickling . Demonstrate a metal matrix titanium composite liner that will reduce energy losses by 6 percent in holding furnaces and in diepreheating during changeovers. Review progress of projects initiated in FY 2003, determine and provide the funding requirements for project completion.</p>

(11) International Market Development – International Market Development will complete program closeout initiated in FY 2003.

Performance Indicators

Number of towns or cities provided technical assistance. Number of workshops sponsored. Number of forums that DOE provided an expert presentation.

Annual Performance Results and Targets

FY 2002 Results	FY 2003 Target	FY 2004 Proposed Target
<p>2 cities provided technical assistance to facilitate their engagement in sustainable energy planning.</p>	<p>Technical assistance to 2 additional cities to facilitate their engagement in sustainable energy planning.</p>	<p>Closeout U.S. participation in the Energy and Environmental Technology Center (EETIC). Complete closeout of International Market Development initiated in FY 2003.</p>

Program Accomplishments

Since 1976, the Weatherization Assistance Program has helped five million American families permanently reduce their energy bills and increase the comfort and safety of their homes.

Weatherization makes homes more energy efficient, which reduces energy bills, thus improving the financial self-sufficiency for low-income families. It helps stabilize the housing stock in low-income neighborhoods and supports technical jobs in local home energy businesses. Recent information (and the amount of Federal funds provided) for each State is shown in the following table:

Weatherization Assistance Program Funding for 2001 (In dollars)

State	2001 Federal DOE Funds	2001 Non-Federal Funds	Source of Non-Federal Funds
Alabama	1,620,906	0	
Alaska	1,148,143	2,000,000	Alaska Housing Finance Agency (State)
Arizona	914,996	939,847	State Funds and Utility Funds
Arkansas	1,394,048	0	State General Funds
California	4,238,044	22,948,732	
Colorado	3,689,256	2,600,000	Utility Funds
Connecticut	1,687,796	1,000,000	Utility Funds
Delaware	387,168	267,000	Utility Funds
District of Columbia	437,201	0	
Florida	1,317,877	2,000,000	State Document and Stamp Tax
Georgia	1,971,410	800,000	Utility Funds
Hawaii	137,693	0	
Idaho	1,328,717	481,735	Utility Funds
Illinois	9,323,696	7,200,000	State Supplemental Energy Assistance
Indiana	4,410,532	2,000,000	Utility Funds through Local Network
Iowa	3,359,006	2,247,970	Utility Funds
Kansas	1,703,713	0	
Kentucky	3,042,989	0	
Louisiana	1,165,702	0	
Maine	2,065,666	1,635,152	HHS REACH Grant
Maryland	1,785,842	850,000	Utility Funds
Massachusetts	4,408,639	12,000,000	Utility Funds
Michigan	10,226,257	0	
Minnesota	6,646,224	3,203,113	Utility Conservation Program

Mississippi	1,109,916	0	
Missouri	4,041,710	1,219,000	State Utilitcare, Utility Funds
Montana	1,710,249	1,168,000	Utility Funds
Nebraska	1,679,110	0	
Nevada	562,559	140,000	Housing Trust Fund
New Hampshire	1,015,772	150,000	Utility Funds
New Jersey	3,435,381	0	
New Mexico	1,285,773	1,000,000	State Funds
New York	13,579,107	7,000,000	Leveraged Non-Federal, Utilities, Owner Invest.
North Carolina	2,799,730	0	
North Dakota	1,695,918	0	
Ohio	9,250,620	8,000,000	Utility Funds
Oklahoma	1,744,765	15,000	Leveraged Non-Federal, Utilities, Owner Invest.
Oregon	1,899,540	760,000	Utility Funds
Pennsylvania	9,901,139	0	
Rhode Island	778,507	600,000	Utility Funds
South Carolina	1,195,436	0	
South Dakota	1,290,524	39,601	Utility Funds
Tennessee	2,815,179	0	
Texas	3,753,569	5,756,968	Utility Funds
Utah	1,398,486	566,000	Utility Funds and State Funds
Vermont	860,443	3,797,406	Weatherization Trust Fund
Virginia	2,704,200	0	
Washington	3,056,649	11,959,086	Utility Funds; State Funds
West Virginia	2,162,350	150,000	Utility Funds and Landlord Contributions
Wisconsin	5,768,714	13,415,000	Public Benefits Utility Funds
Wyoming	793,133	0	
Total, Grants	150,700,000	117,909,610	
Training and Technical Assistance	2,300,000	0	
TOTAL	153,000,000	117,909,610	

In the past 25 years, State Energy Program activities have modernized more than 69,000 buildings to make them more energy efficient, carried out more than 8,000 State energy projects, supported 6,300 jobs annually in the energy efficiency and renewable energy industries, and created community-business partnerships in thousands of local communities. These achievements stem from Federal financial and technical assistance in response to specific State industrial, transportation, and building construction needs. Federal financial and technical assistance has also improved States' capacities to be "early respondents" in emergency situations, and to protect, maintain, and make improvements to critical transmission and other electricity infrastructure.

The types of State Energy Program projects varies from State to State. For example, the Nebraska Dollar and Energy Saving Loan Program uses a revolving loan mechanism to generate funds for energy efficiency improvements (customer loan repayments contribute to future loans for residential, business, and agriculture energy efficiency improvements). The projects financed by the program generated an estimated 1,416 jobs between 1990 and 1996, and created estimated savings of \$16.9 million from reduced energy consumption and \$15.89 million from reduced financing costs between 1990 and 1997. The Energy Division of the Tennessee Department of Economic and Community Development established Energy Emergency Planning to establish the framework for an emergency management plan for the State. It also maintains access to resources and databases that would need to be available in the event of an energy-related emergency. The New York State Energy Research and Development Authority helped deploy 108 alternative fuel vehicles in the State, develop refueling facilities and infrastructure, coordinate stakeholder participation, and disseminate information about the projects. The Oregon Office of Energy administers a Manufactured Homes Program that certifies "Super Good Cents" manufactured homes. And, from 1996 to 2000 14,862 energy efficient homes were manufactured/sited in Oregon, which resulted in total energy savings of approximately 300 billion Btu's.

Rebuild America began in 1994 with the mission to accelerate energy efficiency improvements in existing buildings through community-level partnerships. The Program focuses on K-12 schools, colleges and universities, State and local governments, public and multi-family housing, and commercial buildings. It facilitates the creation of community partnerships between small towns, large metropolitan areas, and Native American Tribes that need energy efficient products and services, and local businesses that provide them. To date, these partnerships have renovated more than 419 million square feet of floor space, saving building owners more than \$119 million each year through private investment for energy-efficiency improvements in excess of \$540 million.

The Codes and Advanced Building Practices project develops core resource materials and provides financial and technical assistance to States to upgrade and implement their minimum building energy codes. It works with national, regional, and State stakeholders to help building owners, builders, and the design community understand the building science, benefits, and techniques for going significantly beyond code with added value strategies. These activities have resulted in energy savings of nearly \$1 billion per year, have improved the energy efficiency of nearly 3 billion square feet of new commercial floor space and nearly 4 million new households, and every \$1 spent by the Program has yielded more than \$105 in annual energy savings.

Clean Cities supports public-private partnerships that deploy alternative fuel vehicles and build

supporting infrastructure. By encouraging the use of alternative fuel vehicles, Clean Cities helps enhance energy security and environmental quality at both the national and local levels. Clean Cities works with local businesses and governments to guide them through the process, including goal-setting, coalition-building, and securing commitments. The purpose of the Clean Cities program is to displace imported petroleum by creating and sustaining markets for alternative fuels and the vehicles that use them. It evolved from the Energy Policy Act of 1992 (EPAct), which directed the Department of Energy to acquire voluntary commitments from fleets, fuel suppliers, and vehicle manufacturers to build an alternative fuel infrastructure, manufacture vehicles, and use both alternative fuels and alternative fuel vehicles. The Department designated its first Clean Cities coalition in Atlanta in 1993. Today, the Clean Cities program has grown to approximately 80 coalitions that all have made significant commitments to use alternative fuels. A key goal of this activity is to increase the consumption of alternative fuel to a market impact of 1 billion gallons by 2010.

Energy Star was introduced by the Environmental Protection Agency in 1992 as a voluntary labeling program designed to identify and promote energy efficient products, with the goal of reducing carbon dioxide emissions. The Department of Energy entered a partnership with the Environmental Protection Agency in 1996 to promote the Energy Star label and to provide its trademark name to commercial buildings and equipment, windows, home designs, and appliances that are highly efficient and cost-effective. The Energy Star Program raises the public's awareness of equipment and appliance energy use and provides easy-to-use information for consumers to make their informed choices. DOE works with more than 4000 retailers to label Energy Star qualified appliances and energy efficient products. Through its partnerships with more than 7,000 private and public sector organizations, Energy Star delivers the technical information and tools that organizations and consumers need to choose energy-efficient solutions and best management practices. Based on the support of both DOE and EPA, Energy Star has successfully delivered energy and cost savings across the country, saving businesses, organizations, and consumers more than \$5 billion a year.

Significant Program Shifts

The National Industrial Competitiveness through Energy, Environment, and Economics (NICE³) helps accelerate development of new energy saving, environmentally friendly technologies and to demonstrate their potential savings and cost reductions. The primary FY 2004 activity will be the successful completion and closeout of the program.

International Market Development focuses on the most critical opportunities to reduce production costs and advance deployment of energy technologies through overseas market expansion. This activity is implemented in key regions through bilateral and multilateral technology cooperation activities and information exchange and dissemination. International Market Development includes two project areas, the Asia Pacific Economic Cooperation (APEC) which more appropriately falls within EWD budget and has been moved, and the closeout of the U.S. membership in the Energy and Environmental Technology Information Center (EETIC).

Funding Profile^a

(dollars in thousands)

	FY 2002 Comparable Appropriation	FY 2003 Amended Request	FY 2004 Request	\$ Change	% Change
Weatherization and Intergovernmental Program					
Weatherization Assistance Program	230,000	277,100	288,200	+11,100	+4.0%
State Energy Program Grants	45,000	38,798	38,798	0	0.0%
State Energy Activities . . .	8,230	2,353	2,353	0	0.0%
Gateway Deployment	40,951	41,195	27,609	-13,586	-33.0%
Total, Weatherization and Intergovernmental Activities	324,181	359,446	356,960	-2,486	-0.7%

Public Law Authorizations:

- P.L. 94-163, "Energy Policy and Conservation Act" (EPCA) (1975)
- P.L. 94-385, "Energy Conservation and Production Act" (ECPA) (1976)
- P.L. 95-91, "Department of Energy Organization Act" (1977)
- P.L. 95-618, "Energy Tax Act of 1978"
- P.L. 95-619, "National Energy Conservation Policy Act" (NECPA) (1978)
- P.L. 95-620, "Power plant and Industrial Fuel Use Act of 1978"
- P.L. 96-294, "Energy Security Act" (1980)
- P.L. 100-12, "National Appliance Energy Conservation Act of 1987"
- P.L. 100-615, "Federal Energy Management Improvement Act of 1988"
- P.L. 102-486, "Energy Policy Act of 1992"

^aSBIR/STTR funding in the amount of \$378,000 was transferred to the Science appropriation in FY 2002.

Funding by Site^a

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$ Change	% Change
Albuquerque Operations Office					
Golden Field Office	271,082	311,339	322,318	+10,979	+3.5%
National Renewable Energy Laboratory	5,530	5,460	3,145	-2,315	-42.4%
Total, Albuquerque Operations Office	276,612	316,799	325,463	+8,664	+2.7%
Chicago Operations Office					
Argonne National Lab (East)	105	468	266	-202	-43.2%
Total, Chicago Operations Office	105	468	266	-202	-43.2%
Idaho Operations Office					
Idaho National Engineering & Environmental Laboratory	100	50	28	-22	-44.0%
Total, Idaho Operations Office	100	50	28	-22	-44.0%
National Energy Technology Laboratory	12,349	13,262	8,382	-4,880	-36.8%
Oakland Operations Office					
Lawrence Berkeley National Laboratory	435	483	266	-217	-44.9%
Total, Oakland Operations Office	435	483	266	-217	-44.9%
Oak Ridge Operations Office					
Oak Ridge National Laboratory	5,621	5,588	3,752	-1,836	-32.9%
Total, Oak Ridge Operations Office	5,621	5,588	3,752	-1,836	-32.9%
Richland Operations Office					

^a“On December 20, 2002, the National Nuclear Security Administration (NNSA) disestablished the Albuquerque, Oakland, and Nevada Operations Offices, renamed existing area offices as site offices, established a new Nevada Site Office, and established a single NNSA Service Center to be located in Albuquerque. Other aspects of the NNSA organizational changes will be phased in and consolidation of the Service Center in Albuquerque will be completed by September 30, 2004. For budget display purposes, DOE is displaying non-NNSA budgets by site in the traditional pre-NNSA organizational format.”

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$ Change	% Change
Pacific Northwest National Laboratory	2,948	3,125	1,719	-1,406	-45.0%
Total, Richland Operations Office	2,948	3,125	1,719	-1,406	-45.0%
Washington Headquarters	26,011	19,671	17,084	-2,587	-13.2%
Total, Weatherization & Intergovernmental Resources .	324,181	359,446	356,960	-2,486	-0.7%

Site Description

Golden Field Office

The Golden Field Office (GO) provides funding for energy experts to serve on the industrial technology panels, and with the assistance of the DOE regional offices, awards grants, primarily to States.

National Renewable Energy Laboratory

The National Renewable Energy Laboratory (NREL) analyzes the program's communications strategy and develops information outreach products for WIP and specific subprograms. NREL provides technology transfer technical outreach for Rebuild America and Energy Smart Schools. NREL also participates in providing technical assistance in identifying and developing energy policies that will reduce greenhouse gas emissions and contribute to development goals through accelerated deployment of renewable energy and energy efficiency technologies. In addition, NREL works cooperatively with the private sector.

Argonne National Laboratory

Argonne National Laboratory (ANL) conducts research and analysis as part of the Clean Cities platform development effort.

Idaho National Engineering and Environmental Laboratory

Idaho National Engineering and Environmental Laboratory (INEEL) provides continuing support for identifying tribal industrial energy needs, assessments, and opportunities for Native Americans.

National Energy Technology Laboratory

National Energy Technology Laboratory (NETL) provides technology transfer technical outreach, grants management system development, and tools development for many WIP activities.

Lawrence Berkeley National Laboratory

Lawrence Berkeley National Laboratory (LBNL) provides technology transfer technical outreach for Rebuild America and EnergyStar.

Oak Ridge National Laboratory

Oak Ridge National Laboratory (ORNL) provides a wide variety of technical and program analysis activities for WIP. Examples include: residential energy audit and advanced weatherization measure analysis, Rebuild America technology transfer technical outreach, policy analysis for EnergyStar, and market assessments of new technologies to Gateway partners.

Pacific Northwest National Laboratory

Pacific Northwest National Laboratory (PNNL) provides technology transfer technical assistance for Gateway partners and tools and materials development, analysis tool development, training, and technical assistance related to new State building energy codes.

Weatherization Assistance Subprogram

Mission Supporting Goals and Measures

The Department of Energy administers the Weatherization Assistance Program by providing technical assistance and formula grants to State and local weatherization agencies throughout the United States. This support improves the energy savings per home and helps States spend non-Federal funding effectively through uniform technical assistance. A network of approximately 970 local agencies provide trained crews to perform weatherization services for eligible low-income households in single-family homes, multifamily dwellings, and mobile homes. Priority is given to the elderly, persons with disabilities, families with children, and households that spend a disproportionate amount of their income on energy bills (utility bills make up 15 to 20 percent of household expenses for low income families, compared to five percent or less for all other Americans). Homes receive a comprehensive energy audit, which is a computerized assessment of a home's energy use and an analysis of which energy conservation measures are best for the home. A cost-effective combination of energy-saving measures is selected for each home based on the comprehensive audit.

Funding Schedule

(dollars in thousands)					
	FY 2002	FY 2003	FY 2004	\$ Change	% Change
Weatherization Assistance					
Weatherization Assistance	226,550	273,005	283,877	+10,872	+4.0%
Training and Technical Assistance	3,450	4,095	4,323	+228	+5.6%
Total, Weatherization Assistance	230,000	277,100	288,200	+11,100	+4.0%

Detailed Program Justification

(dollars in thousands)

	FY 2002	FY 2003	FY 2004
Total, Weatherization Assistance	230,000	277,100	288,200
▪ Weatherization Assistance	226,550	273,005	283,877

FY 2002: Provided State formula grants to weatherize approximately 105,000 low-income homes, saving \$1.80 in energy costs for every dollar invested over the life of the measures (based on current EIA data). Ninety percent of the WAP funding was allocated to the States as operating funds for this purpose, i.e. for labor, materials, equipment, administrative systems, etc.

The other ten percent of the total program funding was allocated for training and technical assistance, to maintain a high standard of technology application, effectiveness, and results. Most of those activities were performed at State and local levels, with \$19,550,000 allocated to States for that purpose.

FY 2003: Provide State formula grants to weatherize approximately 123,000 low-income homes, saving \$1.80 in energy costs for every dollar invested over the life of the measures (based on current EIA data). Ninety percent of the total WAP funding will be allocated to the States as operating funds for this purpose, i.e. for labor, materials, equipment, administrative systems, etc.

The other ten percent of the total program funding will be allocated for training and technical assistance, to maintain a high standard of technology application, effectiveness, and results. Most of those activities will be performed at State and local levels, with \$23,615,000 allocated to States for that purpose.

FY 2004: Provide State formula grants to weatherize approximately 126,000 low-income homes, saving \$1.80 in energy costs for every dollar invested over the life of the measures (based on current EIA energy price data). Ninety percent of the total WAP funding will be allocated to the States as operating funds for this purpose, i.e. for labor, materials, equipment, administrative systems, etc.

Ten percent of the total program funding will be allocated for training and technical assistance, to maintain a high standard of technology application, effectiveness, and results. Most training and technical assistance will be performed at State and local levels, with \$23,615,000 allocated to States for that purpose.

■	Training and Technical Assistance	3,450	4,095	4,323
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FY 2002: In order to effectively support the necessary expansion of the Weatherization network’s technical production capacity, enabling it to deliver services to many more low-income households over the ten-year period beginning in FY 2002, DOE submitted a reprogramming request to correct the allocation of training and technical assistance funds between States and DOE, to resume the historical ratio of 8.5 percent for State activities and 1.5 percent for activities that can be more cost-effectively performed at national/regional levels. /With approval of the reprogramming request, DOE continued to maintain essential management systems and evaluation functions, continued analytic and technical support functions, completed projects delayed from previous year, and worked with stakeholders to ensure investment in such critical expansion areas as equipment and training for additional crews. Participants included: ORNL, NREL, Data Tree, and D&R International.

FY 2003: DOE will fund training and technical assistance activities that can be more cost-effectively performed at national/regional levels, to support effective program operations by the network of State and local Weatherization agencies. DOE will conduct analysis, measure and document program performance, and promote (e.g. through pilot programs, publications, training programs, workshops and peer exchange) the application of advanced techniques and collaborative strategies to continually improve program effectiveness. Participants will include: ORNL and D&R International.

FY 2004: DOE will fund training and technical assistance activities that can be more cost-effectively performed at national/regional levels, to support effective program operations by the network of State and local Weatherization agencies. DOE will conduct analysis, measure and document program performance, and promote (e.g. through pilot programs, publications, training programs, workshops and peer exchange) the application of advanced techniques and collaborative strategies to continually improve program effectiveness. Participants will include: ORNL, D&R, TBD.

State Energy Program (Grants) Subprogram

Mission Supporting Goals and Measures

The State Energy Program Grants activities provide financial assistance through formula grants, enabling State governments to target their own high priority energy needs and expand clean energy choices for their citizens and businesses. These activities were created by Congress in 1996 by consolidating two other efforts — the State Energy Conservation Program, and the Institutional Conservation Program.

State Energy Program Grants activities support Federal/State partnerships that deploy energy efficiency technologies at the State and local level through formula grants and technical assistance. The activity assists State energy offices with energy planning, which includes allowing States to tailor energy efficiency programs to local needs and to leverage non-Federal resources to supplement Federal assistance. To date, State energy offices have been able to leverage their Federal formula grant funding at the rate of \$4 in non-Federal funding for each Federal dollar spent and, for some activities, as much as \$13 to \$14 in non-Federal funding for each Federal dollar. The activity includes a component that engages States in helping achieve Energy Efficiency and Renewable Energy technology program goals through competitive grants using program-directed funds.

Funding Schedule

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$ Change	% Change
State Energy Program (Grants)	45,000	38,798	38,798	0	0.0%
Total, State Energy Program (Grants)	45,000	38,798	38,798	0	0.0%

Detailed Program Justification

(dollars in thousands)

	FY 2002	FY 2003	FY 2004
State Energy Program Grants	45,000	38,798	38,798

FY 2002: Provided grants to 50 States, D.C., and 5 Territories for energy efficiency programs. Supported implementation of SEP Strategic Plan for the 21st Century, addressing key goals of market transformation and collaboration with environmental and economic development interests. Provided technical assistance and training to develop State-level capabilities to form collaborative partnerships and conduct evaluation of the impact of State energy efficiency and renewable energy programs nationwide (45,000). Participants included: States, Data Tree, NREL, ORNL.

FY 2003: Provide grants to 50 States, D.C., and 5 territories for energy efficiency programs. Support implementation of SEP Strategic Plan for the 21st Century, addressing key goals of market transformation and collaboration with environmental and economic development interests. Provide technical assistance and training to develop State-level capabilities to form collaborative partnerships and conduct evaluation of the impact of State energy efficiency and renewable energy programs nationwide (\$38,798). Participants include: States, Data Tree, NREL, ORNL.

FY 2004: Provide grants to 50 States, D.C., and 5 territories for energy efficiency programs. Support implementation of SEP Strategic Plan for the 21st Century, addressing key goals of market transformation and collaboration with environmental and economic development interests. Provide technical assistance and training to develop State-level capabilities to form collaborative partnerships and conduct evaluation of the impact of State energy efficiency and renewable energy programs nationwide (\$38,798). Participants include: States, Data Tree, NREL, ORNL.

■ Special Project State Grants

FY 2002: Awarded Special Project State Grants to States on a competitive, cost-shared basis to help deploy end-use sector technologies in the following EERE programs (shown here for information, but funded in the individual programs):

Building Technology, State and Community Programs: *Building America* \$300, *Rebuild America* \$2,500, Updating and implementing State Building Energy Codes \$1,800;

Federal Energy Management Program: \$500;

Industrial Technologies: Industries of the Future - Specific \$1,440, Industries of the Future - Crosscutting \$1,560;

Transportation Technologies: Clean Cities \$4,500

Subtotal, Energy Conservation: \$12,600

Power Technologies: Renewable Energy Resources

- Solar \$1,200
- Hydrogen \$350
- Distributed Energy & Electricity Infrastructure \$2,505
- Geothermal \$475
- Biomass \$600
- Wind \$770

Subtotal, Renewables: \$5,900

FY 2003: Award Special Project State Grants to States on a competitive, cost-shared basis to help deploy end-use sector technologies in the following EERE programs (shown here for information, but funded in the individual programs):

Community Energy Program: *Rebuild America* \$3,000, Updating and implementing State Building Energy Codes \$1,855;

Federal Energy Management Program: \$500;

Industrial Technologies: Industries of the Future - Specific \$1,340, Industries of the Future - Crosscutting \$1,460;

Transportation Technologies: Clean Cities \$3,500

Subtotal, Energy Conservation: \$11,655

Renewable Energy Resources

- Solar \$1,200
- Hydrogen \$350
- Distributed Energy & Electricity Infrastructure \$2,505
- Geothermal \$475
- Biomass \$600
- Wind \$770

Subtotal, Renewable Energy Resources: \$5,900

FY 2004: Award Special Project State Grants to States on a competitive, cost-shared basis to help deploy end-use sector technologies in the following EERE programs (shown here for information, but funded in the individual programs):

WIP : *Rebuild America* \$2,000 , Updating and implementing State Building Energy Codes \$1,800;
Clean Cities \$500

Federal Energy Management Program: \$500;

Industrial Technologies: Industries of the Future - Specific \$1,340, Industries of the Future -
Crosscutting \$1,460;

Subtotal, Energy Conservation: \$7,600

Power Technologies: Renewable Energy Resources

- Solar \$1,200
- Hydrogen \$350
- Distributed Energy & Electricity Infrastructure \$2,505
- Geothermal \$475
- Biomass \$600
- Wind \$770

Subtotal, Renewable Energy Resources: \$5,900

State Energy Activities Subprogram

Mission Supporting Goals and Measures

Other State Energy Activities complement the State Energy Program activities described above. Cooperative agreements with States provide assistance for energy-related applied research, development, and field testing, which are excluded from the State Energy Program enabling legislation. Planning and evaluation that take place in Other State Energy Activities allow for additional technical assistance to States in support of State Energy Assistance and for necessary information management, planning, analysis, and evaluation projects on the formula grant programs.

Funding Schedule^a

(dollars in thousands)					
	FY 2002	FY 2003	FY 2004	\$ Change	% Change
State Energy Activities					
Cooperative Programs with States Buildings	1,959	0	0	0	0.0%
Cooperative Programs with States Industry	1,959	0	0	-2,000	-100.0%
Cooperative Programs with States Transportation	1,959	0	0	0	0.0%
Planning/Evaluation for State Programs	2,353	2,353	2,353	0	0.0%
Total, State Energy Activities	8,230	2,353	2,353	0	0.0%

^aSBIR/STTR funding in the amount of \$123,000 was transferred to the Science appropriation in FY 2002. Estimates for SBIR/STTR budgeted in FY 2003 and FY 2004 are \$136,346 and \$135,479 respectively.

Detailed Program Justification

(dollars in thousands)

	FY 2002	FY 2003	FY 2004
State Energy Activities	8,230	2,353	2,353
■ Cooperative Programs with States	5,877	0	0
• Cooperative Programs With States- Buildings	1,959	0	0

FY 2002: Awarded cooperative agreements with State organizations under a competitive solicitation to accelerate the adoption of new energy-efficient technologies. These projects conducted applied research and field test projects through an integrated buildings approach in a range of technology areas, such as day lighting, indoor air quality, and thermal distribution. The results of these efforts were communicated to researchers, engineers, facility managers, and others to promote continued technology improvement, and commercial application. SBIR/STTR funding in the amount of \$41,000 was transferred from this subprogram to the Science Appropriation.

FY 2003: Transfer from: Cooperative Programs with States, Building Technology, State and Commonwealth Programs.

As a part of EERE’s ongoing program evaluation activities, this program will be re-baseline in FY 2003 based on the results of projects completed during FY 2001 and FY 2002. For this reason, no additional funds are requested in FY 2003 and no activities are planned.

FY 2004: No activities.

• Cooperative Programs With States- Transportation	1,959	0	0
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FY 2002: Funding awarded through the Golden Field Office and applied to ongoing research, development, and demonstration projects that are crosscutting in nature. Such projects impacted States and was conducted in concert with the transportation, buildings, and industry sectors. This program supported research, development, and demonstration activities that explore and exploit synergies among these varying research fields. SBIR/STTR funding in the amount of \$41,000 was transferred from this subprogram to the Science Appropriation.

FY 2003: No Activities.

FY 2004: No Activities.

• Cooperative Programs With States- Industry	1,959	0	0
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FY 2002: Industrial technologies section of solicitation provided cooperative agreements to

approximately 3-6 States for collaborative applied research, development, and field testing. Partnerships were encouraged with State land grant universities and extension services. Areas of effort focused on specific State needs for one or more of the nine Industries of the Future (IOF). SBIR/STTR funding in the amount of \$41,000 was transferred from this subprogram to the Science Appropriation.

FY 2003: Using carryover of FY 2002 funds, provide cooperative agreements to approximately 3-6 States for collaborative applied research, development, and field testing. Partnerships will be encouraged with State land grant universities and extension services. Areas of effort are expected to focus on specific State needs for one or more of the nine Industries of the Future generated through active State IOF partnerships.

FY 2004: No activities.

■ **Planning and Evaluation Support for State and Local Grant Programs** **2,353** **2,353** **2,353**

FY 2002: Provided technical assistance to State partners in areas such as utility restructuring, newly developed energy efficiency technologies, and urban/regional planning for sustainability. Continued to foster strengthened partnerships between HERE end-use sector offices and the States through activities that support the successful implementation of the Special Project State Grants. Supported evaluation study to assess impacts of the State Energy Program at the State level and nationwide. Supported program oversight, provide State Energy Advisory Board support, and respond to Congressionally mandated reporting requirements.

FY 2003: Provide technical assistance to State partners in areas such as utility restructuring, newly developed energy efficiency technologies, and urban/regional planning for sustainability. Continue to foster strengthened partnerships between HERE end-use sector offices and the States through activities that support the successful implementation of the Special Project State Grants. Support evaluation study to assess impacts of the State Energy Program at the State level and nationwide. Support program oversight, provide State Energy Advisory Board support, and respond to Congressionally mandated reporting requirements.

FY 2004: Provide technical assistance to State partners in areas such as utility restructuring, newly developed energy efficiency technologies, and urban/regional planning for sustainability. Continue to foster strengthened partnerships between HERE end-use sector offices and the States through activities that support the successful implementation of the Special Project State Grants. Support evaluation study to assess impacts of the State Energy Program at the State level and nationwide. Support program oversight, provide State Energy Advisory Board support, and respond to Congressionally mandated reporting requirements.

Participants include: Atlanta Regional Office (RO), Boston RO, Chicago RO, Denver RO, Philadelphia RO, Seattle RO, ORNL, NREL, Data Tree.

Gateway Deployment Subprogram

Mission Supporting Goals and Measures

Gateway Deployment is a recent organizational and deployment activity established to accomplish effective delivery of the full menu of efficiency and renewable resources aligned with clear community and customer focus. The activity focuses on the end user needs, rather than individual HERE programs. It provides easier access to EERE's vast array of technologies and resources to ensure these are part of the economic solutions for communities across the country. Through an integrated information and outreach approach, Gateway Deployment facilitates "one-stop" access to a variety of specialized technical and financial assistance through activities such as Rebuild America, Energy Efficiency Information and Outreach, Building Codes Training and Assistance, Clean Cities, Energy Star, NICE³, Inventions and Innovations, and International Market Development. States and HERE regional offices are the key implementing entities for solutions and customer service. The closeout of NICE³ will be completed in FY 2004.

Funding Schedule

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$ Change	% Change
Gateway Deployment					
Rebuild America	11,938	12,723	8,628	-4,095	-32.2%
Energy Efficiency Information and Outreach	2,500	2,409	1,409	-1,000	-41.5%
Building Codes Training and Assistance	4,300	4,855	4,500	-355	-7.3%
Clean Cities	11,010	8,610	6,610	-2,000	-23.2%
Energy Star	3,000	6,200	3,700	-2,500	-40.3%
National Industrial Competitiveness through Energy, Environment, and Economics	2,681	2,736	0	-2,736	-100.0%
Inventions and Innovations	4,322	2,372	2,372	0	0.0%
International Market Development	650	650	0	-650	-100.0%
Technical/Program Management Support	550	640	390	-250	-39.1%
Total, Gateway Deployment	40,951	41,195	27,609	-13,586	-33.0%

Detailed Program Justification

(dollars in thousands)

	FY 2002	FY 2003	FY 2004
Gateway Deployment	40,951	41,195	27,609
▪ Rebuild America	11,938	12,723	8628

FY 2002: Established 50 new *Rebuild America* community partnerships and assisted these communities to retrofit 80 million square feet of floor space in schools and commercial buildings and State and local government-owned facilities. Overcame information barriers by providing web-based training, decision tools, and case studies that increase the market demand for energy efficient products, and project development and financing services while making building owners better informed buyers. Applied whole-buildings research to Rebuild America building energy projects. Partnered with national organizations, manufacturers, utilities, and the energy service industry to leverage resources. (Included \$2,500 for the State Energy Program Special Project State Grants)

FY 2003: Over 400 existing partnerships upgrade 80 million square feet of floor space in schools and commercial buildings and State and local government-owned facilities. Expand into healthcare, grocery, and restaurant facilities to support Energy Star label. Overcome information barriers by providing web-based training, decision tools, and case studies that increase the market demand for energy efficient products, and project development and financing services while making building owners better informed buyers. Apply whole-buildings research to Rebuild America building energy projects. Partner with national organizations, manufacturers, utilities, and the energy service industry to leverage resources. By 2005, assist over 1,000 school districts build new schools that are 30 percent more efficient than energy codes. Energy cost savings can help hire teachers or buy computers and books. (Includes \$3,000 for the State Energy Program Special Project State Grants)

FY 2004: Help 500 new and existing partnerships upgrade 70 million square feet of floor space in schools and commercial buildings and State and local government-owned facilities. Begin providing design assistance for new construction in mature market sectors, e.g. schools, colleges, State and local government buildings. Provide existing partnership base with access to information on energy solutions to broader needs, e.g. wastewater treatment plants. Overcome information barriers by providing web-based training, decision tools, and case studies that increase the market demand for energy efficient products, and project development and financing services while making building owners better informed buyers. Apply whole-buildings research to Rebuild America building energy projects. Partner with national organizations, manufacturers, utilities, and the energy service industry to leverage resources. Continue to provide comprehensive HERE technologies to K-12 priority market sector. Energy cost savings can help hire teachers or buy computers and books. Incorporate affordable housing support extension of Building America, and Energy Star home improvement activities. (Includes \$2,000 for the State Energy Program Special Project State Grants).

Participants include: ORNL, PNNL, LBNL, national association of State Energy Officials, national Association of Energy Service Companies.

- **Energy Efficiency Information Outreach** **2,500** **2,409** **1,409**

FY 2002: Building Energy Efficiency Information Outreach (formerly Information and Outreach). Focused outreach efforts to homeowners and homebuilders by providing information and education materials on energy efficiency to media outlets and other business communication channels. The effort was designed to help the target audiences make the best decisions related to new construction, renovations and purchasing of products. Updated and integrated website tools and information to assist consumers, school officials, and home builders.

FY 2003: Information-outreach is essential to overcome information barriers in the marketplace and to allow consumers and businesses to make informed purchasing decisions. FY 2003 communication campaigns will target three key markets; consumers, home builders, and school officials.

FY 2004: Information-outreach is essential to overcome information barriers in the marketplace and to allow consumers and businesses to make informed purchasing decisions. Activities will result in packaged information on appropriate HERE technologies for key market segments, e.g consumers, homeowners, and school officials. Outreach will use web based tools, media outlets and business communication channels to leverage effectiveness.

- **Building Codes Training and Assistance** **4,300** **4,855** **4,500**

FY 2002: Provided technical and financial assistance to States to update and implement their energy codes to meet Standard 90.1-1999 for commercial buildings and the 2000 IECC for residential buildings. Trained over 4,000 code officials, designers and builders to implement these codes. Updated core code compliance and training materials and tools to incorporate the provisions of the 2001 edition of Standard 90.1 and initiated the updating of core code compliance and tools to incorporate the provisions of the Federal residential code and the 2003 IECC.

FY 2003: Provide technical and financial assistance to States to update and implement their energy codes to meet the 2001 edition of Standard 90.1 for commercial buildings and the 2003 edition of the International Energy Conservation Code for residential buildings. Train approximately 2,000 code officials, designers, and builders to implement these codes. Update and improve core materials and code compliance software to reflect recent changes in the model energy codes and emerging energy efficiency technologies.

Builder Training: Develop a comprehensive training program, including building codes, to transfer Building America lessons learned (beyond code) to home builders in selected fast growing markets for home construction.

FY 2004: Provide technical and financial assistance to States to update and implement their energy codes to meet the 2001 edition of Standard 90.1 for commercial buildings and the 2003 edition of the International Energy Conservation Code for residential buildings. Train approximately 2,000

code officials, designers, and builders to implement these codes. Update and improve core materials and code compliance software to reflect recent changes in the model energy codes and emerging energy efficiency technologies.

Builder Training: Work with 3-5 pilot States, builder organizations, and financial institutions to provide package combining builder training, Energy Star promotion and financing for new and existing homes.

■ **Clean Cities - Core Program** **11,010** **8,610** **6,610**

FY 2002: In support of EPACT Section 505, continued to focus alternative fuel efforts in selected niche markets, with particular attention on medium and heavy-duty vehicles. Discontinued rebate activity. Helped local coalitions identify non-Federal sources of support to create self-sustaining local programs. Facilitated, through DOE regional offices, local coalition market development, training, and grants management. Continued use of technical assistance teams to help address technical niche market issues raised by local Clean Cities coalitions. (NREL, Other) Act of 1992 (EPACT)

Tools and Training: In support of EPACT Section 505, continued efforts to provide targeted niche market assistance and training to a limited number of coalitions. Continued support for the Alternative Fuels Data Center, hotline, and other information dissemination activities. Provided training to coalitions to enable development of stronger organizational coalitions. (NREL)

Competitive Grants: In support of EPACT Sections 302 and 409, issued State grants and other public/private partnership grants to competitively fund projects that support infrastructure development and vehicle use in niche markets. Provided \$4.5 million for 40-55 Special Project State Energy Grants. Of that, at least \$0.50 million was for Energy Smart School bus projects. (States)

Education and Outreach: In support of EPACT Section 405, sponsored 8th Annual Clean Cities Conference to showcase commercially available AFVs and advanced technology vehicles. Published case studies of successful alternative fuel niche market applications. Updated and expanded the improved Fuel Economy Guide and web-site www.fueleconomy.gov. Continued building alliances to promote fuel efficient advanced technology vehicles. Promoted the use of fuel saving anti-idling devices for heavy truck fleets. (ANL, NREL, ORNL, GPO)

International Coordination: Conducted one reverse trade mission to showcase U.S. alternative fuel successes. Facilitated training program on natural gas vehicles in India, consistent with National Energy Policy. (NREL, Other)

SBIR/STTR funding in the amount of \$150,000 was transferred from this subprogram to the Science Appropriation.

FY 2003: In support of Energy Policy Section 505, continue to focus alternative fuel efforts in selected niche markets, and strengthen focus on medium and heavy-duty vehicles. Help local coalitions identify non-Federal sources of support to create self-sustaining local programs.

Facilitate, through DOE regional offices, local coalition market development, training, and grants management. Continue limited use of technical assistance teams to help address technical niche market issues raised by local Clean Cities coalitions. (NREL, Other) Act of 1992 (EPACT)

Tools and Training: In support of EPACT Section 505, continue efforts to provide targeted niche market assistance and training to a limited number of coalitions. Continue support for the Alternative Fuels Data Center, hotline, and other information dissemination activities. Provide training to coalitions to enable development of stronger organizational coalitions. (NREL)

Competitive Grants: In support of EPACT Sections 302 and 409, issue State grants and other public/private partnership grants to competitively fund projects that support infrastructure development, vehicle use in niche markets, and technology demonstration. Provide \$3.5 million for 35-45 Special Project State Energy Grants. Of that, about \$0.50 million will be for Energy Smart School bus projects. (States)

Education and Outreach: In support of the National Energy Policy recommendation to expand consumer education and EPACT Section 405, sponsor 9th Annual Clean Cities Conference to showcase commercially available AFVs and advanced technology vehicles. Publish case studies of successful alternative fuel niche market applications. Update and expand the Fuel Economy Guide and web-site www.fueleconomy.gov. Continue building alliances to promote fuel efficient advanced technology vehicles. (ANL, NREL, ORNL, GPO)

International Coordination: Continue to showcase U.S. alternative fuel successes. (NREL, Other)

FY 2004: In support of Energy Policy Section 505, continue to focus alternative fuel efforts in selected niche markets, especially school bus fleets. Facilitate, through DOE regional offices, local coalition market development, training, and grants management. Continue limited use of technical assistance teams to help address technical niche market issues raised by local Clean Cities coalitions. Develop strategies for incorporating alternative fuels into the local homeland security planning initiative. Continue platform development for key niche market alternative fuel vehicles. (NREL, Other)

Tools and Training: In support of EPACT Section 505, continue efforts to provide targeted niche market assistance and training to a limited number of coalitions and to school bus fleets. Continue support for the Alternative Fuels Data Center, hotline, and other information dissemination activities. (NREL)

Competitive Grants: In support of EPACT Sections 302 and 409, issue State grants and other public/private partnership grants to competitively fund projects that support infrastructure development, vehicle use in niche markets, and technology demonstration. Provide \$0.5 million for 10 Special Project State Energy Grants. Of that, about \$0.10 million will be for Energy Smart School bus projects. (States)

Education and Outreach: In support of the National Energy Policy recommendation to expand consumer education and EPACT Section 405, sponsor 10th Annual Clean Cities Conference to showcase commercially available AFVs and advanced technology vehicles. Publish case studies of

successful alternative fuel niche market applications. Continue building alliances to promote fuel efficient advanced technology vehicles. (ANL, NREL, ORNL, GPO)

International Coordination: Continue to showcase U.S. alternative fuel successes. (NETL, Other)

■ **Energy Star Program** **3,000** **6,200** **3,700**

FY 2002: Developed draft criteria for a commercial Energy Star window specification. Began the development of an Energy Star specification for domestic hot water heaters. Worked with the Building Technologies Program and industry partners to resolve outstanding testing and specification issues on dishwashers and other appliances. Coordinated with EPA on scheduling of future products deemed ready for Energy Star specifications. Increased targeted promotional and consumer education activities with over 1,300 existing and emerging utility, manufacturing, and retail partners. Increased emphasis with the existing established State and regional groups to integrate ENERGY STAR into their energy efficiency programs. Updated materials for partners for use in their own training programs. Coordinated with EPA on website functionality, partner database and cross promotional materials. The Efficient Windows Collaborative was transferred to the Windows research area and is no longer supported by the ENERGY STAR program.

FY 2003: Expand consumer interest in energy efficient appliances, and adding hot water heaters to the Energy Star label. This funding will result in the following impacts: Promote energy-efficiency upgrade path for the homes of middle-income families. Increase market share for Energy Star appliances to 20 percent by 2005 & 25 percent by 2010, compared to 15 percent in 2001. By 2010 increase market share for Energy Star windows to 65 percent, compared to 25 percent in 2001.

FY 2004: Expand consumer interest in energy efficient appliances, finalizing the commercial Energy Star window specification and completing the draft Energy Star specification for hot water heaters, in consensus with industry. This funding will result in the following impacts: Promote energy-efficiency upgrade path for the homes of middle-income families. Increase market share for Energy Star appliances to 18 percent by 2005 & 22 percent by 2010, compared to 15 percent in 2001. By 2010 increase market share for Energy Star windows to 55 percent, compared to 25 percent in 2001. Participants include: ASE, ORNL, D&R, ADL, RPI, ROs, Gallup.

■ **NICE³** **2,681** **2,736** **0**

FY 2002: Incrementally funded 8 new projects to demonstrate energy saving technologies in the Industries of the Future. Completed the development of a combinatorial chemical analysis technology that samples 20-100 times faster than current prep-scale Liquid Chromatography technology. SBIR/STTR funding in the amount of \$55,000 was transferred from this subprogram to the Science Appropriation.

Participants included: Air Products and Chemicals Inc., Texas Energy Coordination Council, Wisconsin Division of Energy, Georgia Department of Natural Resources, Princeton Advanced Technology, Louisiana Department of Natural Resources, Exxon Mobil Chemical Corp., Indiana Department of Commerce, OG Technologies, Inc., PPG Industries, Inc., Dynamet Technology, Inc., Graphic Engineering, New Mexico Energy, Minerals, and Natural Resources Department.

FY 2003: Provide financial assistance to demonstrate energy saving technologies in the IOF industries. There will be approximately 8 incrementally funded grants awarded in FY 2003. Complete the development of a high efficiency adjustable speed drive coupling system to potentially reduce energy costs by up to 40 percent or more for motor driven systems in industry.

Participants include: Oregon Office of Energy, Venetek, Inc., Resodyn Corporation, Illinois Department of Commerce and Community Affairs, Superior Graphite Co., EMN Division, Eastman Chemical Co., Metalforming Controls Corp.

FY 2004: NICE³ will complete program closeout activities.

■ **Inventions and Innovation** **4,322** **2,372** **2,372**

FY 2002: Incrementally funded 20 grants to independent inventors and small technology-based businesses through a competitive processes. Continued to provide assistance to small businesses and independent inventors to develop skills in technology commercialization. Conducted two technology implementation workshops. Continued funding energy saving projects initiated in FY 2001. Completed the development of a Distillation Column Flooding Predictor that identifies instability in a petroleum refinery distillation tower prior to flooding, a technology that will improve petroleum refinery distillation tower throughput by 2 to 5 percent. SBIR/STTR funding in the amount of \$50,000 was transferred from this subprogram to the Science Appropriation.

FY 2003: Incrementally fund up to 20 grants to independent inventors and small technology-based businesses. Continue to provide financial assistance to inventors and innovators developing energy saving technologies. Two technology implementation workshops for small businesses and independent inventors are planned. The program will continue to work closely with the NICE³ Program to support an integrated delivery of Industrial technologies's services to IOF partners.

FY 2004: Incrementally fund up to 20 grants to independent inventors and small technology-based businesses. Continue to provide assistance to small businesses and independent inventors to develop skills in technology commercialization. Review progress of projects initiated in FY 2003, determine and provide the funding requirements for project completion. Demonstrate an innovative method for regenerating spent hydrochloric acid from steel picking .

■ **International Market Development Program** **650** **650** **0**

- Asian Pacific Economic Cooperation (APEC) 600 585 0

FY 2002: Continued the U.S. leadership role in this international cooperative effort. Continued dialogue and participation with member countries in energy efficiency activities. Showcased U.S. technologies in member countries.

Participants included: ORNL, NREL, ANL.

FY 2003: Continue the U.S. leadership role in this international cooperative effort. Implement APEC Sustainable Village activities in China. Continue dialogue and participation with member countries in energy efficiency activities. Showcase U.S. technologies in member countries.

Participants included: ORNL, NREL, ANL.

FY 2004: Activities of this program will continue, funded within the Energy and Water Development appropriations request.

- Energy and Environment Technology Centers (EETIC) 50 65 0

FY 2002: Greenhouse Gas Technology Information Exchange (GREENTIE). Continued U.S. membership in this International Energy Agency Energy and Environmental Technology Information Centers (IEA/EETIC) Annex for the support and up keep of an information directory on technology applications which reduce greenhouse gas emissions and support for regional networks to disseminate that data.

FY 2003: Cancel U.S. membership in an international energy technical information center.

FY 2004: No activities.

- **Technical/Program Management Support** 550 640 390

FY 2002: Included activities which were integral parts of the distributed generation technology development program. Representative activities include preparation of program, strategic plans, and operating plans; R&D feasibility studies and trade-off analysis; evaluation of the impact of new legislation on R&D programs; analysis of energy issues pertinent to the R&D program; development of communication tools; identification of performance measures and methodologies (including GPRA); data collection to assess program and project performance, efficiency and impacts; and development of performance agreements with management.

FY 2003: Representative activities will include preparation of program, strategic plans, and operating plans; R&D feasibility studies and trade-off analysis; evaluation of the impact of new legislation on R&D programs; analysis of energy issues pertinent to the R&D program; development of communication tools; identification of performance measures and methodologies (including GPRA); data collection to assess program and project performance, efficiency and impacts; and development of performance agreements with management. Will include activities which will be an integral part of the distributed generation technology development program.

FY 2004: Representative activities will include preparation of program, strategic plans, and operating plans; R&D feasibility studies and trade-off analysis; evaluation of the impact of new legislation on R&D programs; analysis of energy issues pertinent to the R&D program; development of communication tools; identification of performance measures and methodologies (including GPRA); data collection to assess program and project performance, efficiency and impacts; and development of performance agreements with management.

Total, Weatherization and Intergovernmental Activities	324,181	359,446	356,960
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Explanation of Funding Changes

FY 2004 vs FY 2003 (\$000)

Weatherization Assistance

- Weatherization Assistance - Increase meets the President’s commitment to this program and reflects “moderately effective”rating using Program Assessment Rating Tool (PART) +11,100

Gateway Deployment

- Rebuild America- Subprogram activities consolidated to focus efforts and encourage participation and support from our partners in these activities -4,095
- Energy Efficiency Information and Outreach- Consolidation to focus efforts towards achieving greater collaborative partner support -1,000
- Building Codes Training & Assistance- Slight consolidation reflects refocusing of efforts to better assist Gateway goals. -355
- Clean Cities- Consolidated activity to assist coalitions and Gateway goals. -2,000
- Energy Star- Consolidation and refocus of subprogram activities reflects efforts to better assist Gateway activities. -2,500
- NICE3- Decrease reflects closeout. Subprogram has met its objectives of showing the value of industry initiatives to explore new technology breakthroughs. -2,736
- International Market Development- Closing down U.S. participation in EETIC while continuing APEC participation in the Energy Supply side of Weatherization and Intergovernmental Program budget -650
- Technical Management and Support - Reflects projected needs of refocused efforts this element supports -250

Total, Gateway Deployment	-13,586
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Total Funding Change, Weatherization and Intergovernmental Program	-2,486
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