# U.S. DEPARTMENT OF Energy



# Rebuild America partnerships are turning energy efficiency into economic success nationwide



"Energy efficiency is a tool to help improve communities and make them sustainable... We've already identified over \$2.5 million in annual savings in about 6.5 million square feet of space."

Bob Housh Project Director **EnergyWorks** in Kansas City, Missouri

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"I see a strong commitment to helping us without putting bureaucracy in the way. Now we're moving forward with our program."

Kal Kobayashi Energy Coordinator County of Maui, Hawaii

"ReEnergize East Bay is mining the energy resources that are already buried within our existing buildings. [They] have helped the Berkeley municipal government save about \$120,000 per year in energy bills and reduce carbon dioxide greenhouse emissions by about 670 tons per year."

Shirley Dean Mayor Berkeley, California

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# Building owners and tenants spend nearly \$100 billion on energy every year

That's too much. Some of those dollars can be put to better use.

More than 160 Rebuild America partnerships
— state and local governments, private
businesses, community groups, and many
others — are doing just that by reducing their
energy costs in commercial, government, and
multifamily buildings.

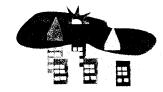
Rebuild America lets partnerships choose the best ways to improve their communities, and supports them with a national network of technical and business experts, resource materials, and access to innovative solutions.

Take a look at what they're doing, and think about what else you could do with the money you're spending on energy.

Then call 1-800-DOE-EREC and join Rebuild America.

# By the year 2003, Rebuild America partnerships will be involved in over 2 billion square feet of building renovations. These projects will:

Reduce air pollution by 1.6 million tons of carbon dioxide a year

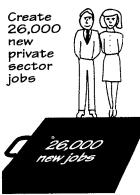


Generate \$3 billion in private community investment



Save \$650 million every year in energy costs





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### Introducing Rebuild America

Rebuild America is a voluntary program that helps community partnerships make profitable investments in existing buildings through energy-efficient technologies.

When communities and businesses form Rebuild America partnerships with each other and the U.S. Department of Energy (DOE), they have access to the technical and business resources they need for success. Partnerships tailor their programs to local needs, choosing which buildings to renovate, how much energy to save, and the best technologies to use.

#### The Results Are Clear

More than 160 partners have already committed to retrofit over 500 million square feet of space. Their Rebuild America projects will save money, create jobs, promote growth, and protect the environment.

#### **Save Money**

Hampden County, Massachusetts, is saving \$350,000 a year on energy costs in its 250,000-square-foot Hall of Justice. Those savings will pay for the program through an innovative performance contract. Most partnerships expect to save an average of 25% of their energy bills.

#### **Create Jobs**

**EnergyWorks** of Kansas City, Missouri, is creating 1,700 jobs through its Rebuild America program. Making buildings more energy efficient creates many new private sector jobs in local economies. According to Ron Horstman of **Sioux Center, Iowa,** the dollars spent on energy efficiency "stay in the community and roll over a few times. And that creates more jobs."

"Through Rebuild Boston, the comfort and economic benefits of energy conservation will reach the residents who need them most."

Rebuild Boston partner Michael L. Kennedy, Chairman of Citizens Conservation Corporation

Look for these partnership icons throughout:

Local Governments

State Governments

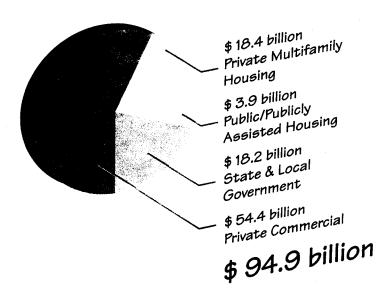
Schools and Universities





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### Commercial and multifamily buildings account for over 20% of all energy costs in the United States



#### So the potential savings are large.

Private Commercial - \$6.5 billion

Private Multifamily Housing - \$2.3 billion

Public/Publicly Assisted Housing - \$0.8 billion

State & Local Government - \$2.4 billion

#### Potential savings for these buildings:

#### \$12 billion

Source: Energy Information Administration, 1993, as modified by Rebuild America

#### **Promote Growth**

Over \$50 million will be invested in community development thanks to **Rebuild Boston.** They've discovered that energy efficiency goes hand in hand with economic efficiency.

#### **Protect the Environment**

The **City of Berkeley, California,** cut annual greenhouse gas emissions by 670 tons by

taking advantage of common-sense energy efficiency opportunities. Producing the energy that runs buildings is a significant source of pollution and using less of it makes our air and water cleaner.

Rebuild America partners are seeing that energy efficiency means real results. Energyefficient buildings cost less to operate, increase in market value, and enhance worker productivity.

Community and Economic Development Agencies



Housing Authorities



### Your Partnership Network

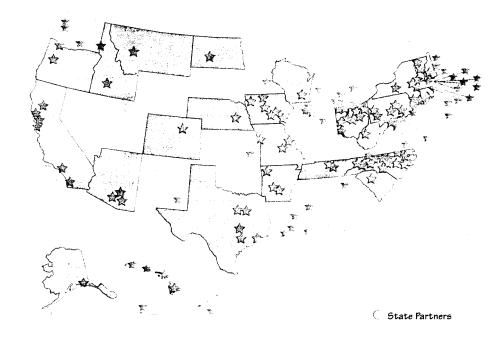
Rebuild America partnerships include public and private organizations across the country, including states like California, Nebraska, and Arkansas . . . communities like Atlanta; San Diego; and Lancaster, Pennsylvania . . . community development groups like the Center for Energy and Environment in Minnesota and EnergyWorks in Missouri and educational institutions like Texas A&M, Southeast Kansas Educational Service Center, and the University of Maryland at Baltimore.

Partnerships learn from each other through regional and on-site workshops, national conferences, newsletters and Internet sites, and many publications. They exchange best practices, discuss new developments, and move their programs forward.

Together they are making a difference in their communities — improving economic performance and protecting the environment.

You can join them!

### Rebuild America has partnerships throughout the nation

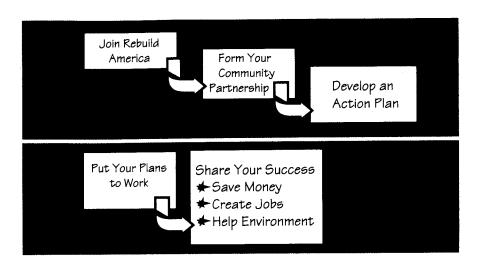




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Rebuild Springned, massachusetts, is saving \$24,000 a year thanks to energy efficiency upgrades in their City Hall.

Rebuild America helps partnerships succeed

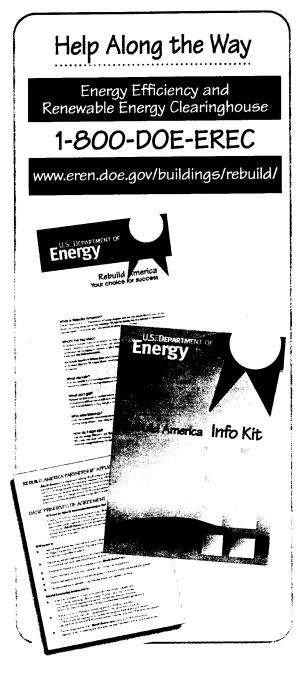


Rebuild America partnerships are involved in every aspect of their communities. While the **Chicago Housing Authority** improves thousands of apartments, the **City of Richland, Washington,** is developing a citywide facility management plan, and **1500 Days: The Central Ohio Energy Efficiency Project** is working with high-traffic commercial buildings like movie theaters and restaurants.

Rebuild America provides a wide array of services that reflect this diversity, instead of a rigid "one-size-fits-all" program. Tailored assistance services are available in every element of the Rebuild America program: Join Rebuild America, Form Your Community Partnership, Develop an Action Plan, Put Your Plans to Work, and Share Your Success.



### Join Rebuild America



Joining Rebuild America is as simple as sending in a one-page application signed by the head of your organization. That could be a mayor, CEO, energy director, or anyone else authorized to commit your organization's resources. You can get an application by calling 1-800-DOE-EREC (TDD 1-800-273-2957) or visiting the Rebuild America web site at www.eren.doe.gov/buildings/rebuild.

When you join, you agree to:

- Lead the formation of a community partnership with organizations in your area.
- Develop an action plan within one year of the agreement, which identifies your goals.
- Promote your participation in Rebuild America through marketing materials and use of the logo.

#### Form Your Community Partnership

Any organization can lead a Rebuild America partnership. What's needed is the commitment to create and carry out an action plan, and the participation of at least one agency of state or local government. Your local partnership may have dozens of partners, ultimately including public and private building owners.



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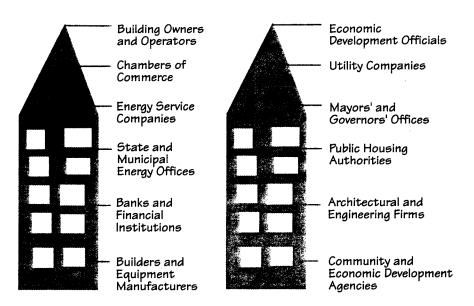


### Form Your Community Partnership

### Everyone benefits from Rebuild America

"We had a number of programs we wanted to coordinate [and] decided Rebuild America was an ideal umbrella."

John Ruckes Lead Planning Analyst Connecticut Office of Policy and Management



### Help Along the Way

Your Rebuild America program representative, who begins working with you when you join, will introduce you to the program and help you identify and reach out to potential partners. You'll have access to other partnerships through the Community



Partnership Notebook and Rebuild

America web site, which showcase

successful partnerships and provide

guidance on completing projects.



1500 Days: The Central Ohio Energy Efficiency Project produces a weekly television series on energy and buildings and is working with a national movie theater chain to retrofit all of their theaters in the Northeast.

All successful ventures, including Rebuild America partnerships, take planning. Your action plan, like a company's business plan or government's economic development plan, is where you identify your choices of the who, what, where, when, and how of your program.

Your partnership has one year to complete an action plan. You'll need to analyze the needs and opportunities of the community you propose to serve, and decide how to make a difference. Nearly 60 % of businesses fail in their first five years, largely due to inadequate planning. Your action plan is critical to successfully completing multi-year energy efficiency projects.

In addition to describing the responsibilities of partners and the resources available to meet them, your action plan will identify:

- Target markets, such as municipal, commercial, and multifamily residential buildings.
- Program priorities and goals, including the amount of square feet to retrofit, energy reductions, and expected dollar and pollution savings.
- Plans for collecting and analyzing building data, completing projects, and verifying savings.
- Project financing options.
- Plans for promoting your services to building owners in your target markets and publicizing your results.

#### Help Along the Way

Rebuild America program representatives help you develop

your action plan through workshops on partnership

formation and action plan development. They will also



provide you with energy

accounting software and

business and technical

guides that address building ventilation, financing, and other topics. You can review the action plans of other partnerships on the Rebuild America web site.

Your action plan will show potential partners, financiers, and building owners the benefits they'll receive by joining Rebuild America.

Action plans help you target the biggest energy reduction and cost-saving opportunities so you can achieve the greatest dollar returns for your community. They help you focus priorities, develop realistic goals, and make strategic business decisions. If you already have a business plan, your action plan should complement it.

Ultimately, your action plan will help you and your partnership succeed.



Tennessee's Community Prergy Partnership is helping the rural communities cut greenhouse gas emissions by nearly 22 million pounds by increasing the energy efficiency of 66 buildings.

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### .... Your Roadmap to Energy Savings



"A community focus will target city- or county-owned buildings as well as hospitals, schools, recreation centers, multifamily buildings, and state and Federal buildings... These local buildings, turned energy efficient, will serve as examples to local businesses that will be encouraged to follow their lead."

From Rebuild Colorado's action plan



"Our objectives are to increase energy efficiency in nearly 14 million square feet of institutional facilities [and] 10 million square feet of commercial and retail properties, and weatherize 4,000 multifamily apartment units."

From **Portland Partners for Energy Efficiency's** action plan in Oregon

"The program will integrate energy education, energy tracking and monitoring, and operations and maintenance . . . into the comprehensive array of energy efficiency services currently available in Minneapolis and Saint Paul."

From the Competitive Buildings Initiative of Minneapolis/Saint Paul's action plan



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### Put Your Plans to Work

With a completed action plan, you can begin the core of the Rebuild America program . . . improving existing buildings.

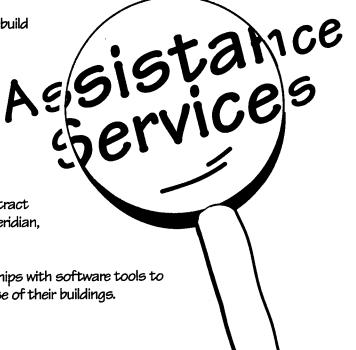
This is a business process, involving building owners, energy engineers, facility managers, and financing specialists, among others. Some projects can be completed in days, while others may take a couple of years. The financial, operational, and community rewards are worth it, which is why Rebuild America offers an extensive array of products and services to help you succeed.

#### **Assistance Services**

Partnerships implementing their action plans can call upon Rebuild America's network of business, technical, and financial experts. They can provide customized assistance as well as Rebuild America's technical guides on topics like building commissioning and ventilation. Other guides focus on financing and contracts.

Through assistance services, Rebuild America is:

- Helping the State of Vermont consider residential use of alternative fuel sources for heating.
- Reviewing Requests for Qualifications and other contract documents for the city of Meridian, Mississippi.
- Providing dozens of partnerships with software tools to accurately rank the energy use of their buildings.





Rebuild America helped the Chicago Housing Authority develop an insulated wallboard system that removes the threat of lead paint and is 12 times stronger than traditional drywall.



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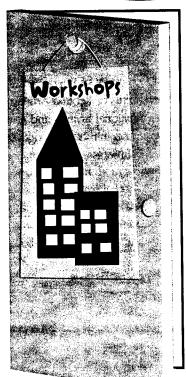
#### **Building Bridges to Other Programs**

Program representatives help partnerships connect with other community development, energy, and environmental programs sponsored by Federal and state government agencies, including:

- Buildings for the 21st Century (DOE)
- Energy Star Buildings and related programs (Environmental Protection Agency)

- Motor Challenge (DOE)
- Clean Cities (DOE)
- Million Solar Roofs Initiative (DOE)
- Empowerment Zones and Enterprise Communities (Department of Housing and Urban Development)

### Welcome to Rebuild America Workshops



#### Recent workshop topics include:

Building Audit Methods

Operations and Maintenance Improvements

CoolSense, the Network for Integrated Chiller Retrofits

Financing Options and Performance Contracting

Residential Weatherization

Benchmarking Tools

Heating and Cooling Systems

**Building Commissioning** 



The Hawaii State Public Library System is improving its 49 libraries on Hawaii's six major islands through a performance contract that allows them to pay for upgrades with their savings.



#### **Community Outreach**

Marketing your program — in the media, among business networks, and through community resources — is critical. Rebuild America will help you here too. Some partnerships, like 1500 Days: The Central Ohio Energy Efficiency Program, use newspaper and television advertising to get their message out. Others, like Rural Alaskans Conserve Energy, hold public events and press conferences to build awareness.

Rebuild America provides partnerships with materials for reaching out to their communities, including a *Press Kit* and a Media Relations section in the *Community Partnership Notebook*. The Rebuild America web site includes case studies and profiles of successful partnerships, including links to their action plans and Internet home pages.

#### **Recognizing Partners**

Your participation in Rebuild America won't go unnoticed. A national newsletter, *Partner Update*, explores partner activities, industry trends, and upcoming events. When you complete your action plan, Rebuild America will profile your partnership on the Rebuild America web site.







The Department of Energy acknowledges the achievements of Rebuild America partnerships through national awards and recognition. Many partnerships also recognize accomplishments locally.



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EnergyWorks identified \$2.5 million in annual energy savings for government and non-profit buildings in the Kansas City, Missouri, area, and set up a revolving loan fund to finance retrofit projects.



"It was very helpful to talk to other partners and see what they are doing. It was important to keep the momentum going."

Dan Walsh, coordinator of Rebuild Springfield in Massachusetts, on Rebuild America's national conferences

#### **Share Your Success**

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You will have many opportunities to share your successes and challenges with fellow partnerships, and learn from them as well. Rebuild America sponsors workshops on a variety of topics year-round across the country, and a national conference brings together hundreds of partnerships and industry experts.





Duke University experience save \$600,000 a year from a campus-wide energy efficiency program. They've already done lighting upgrades in 70 buildings, and water conservation measures are in place in 110 buildings.

### Partnerships In Action: Local Governments



### **Energy Efficiency** is Smart Business

#### San Diego's Environmental Services

**Division** Director Richard Hays and Mayor Susan Golding saved \$3 million over the cost of a new building by renovating the Ridgehaven building as an environmentally sound workplace that showcases sustainable building practices.

Hays noted, "The objectives of the Ridgehaven project were to walk the talk," and to demonstrate that we could do with limited resources what we hoped other people would be able to do in the community. And that's to build an environmentally sound, energy efficient, water conserving facility, within budget, that will save time and money."

The Ridgehaven project used construction materials that were already in place or were recycled, recyclable, or renewable. The HVAC system was modified to provide high-quality indoor air and high-efficiency heat pumps and lighting were installed.

Ridgehaven is saving San Diego almost \$84,000 a year — a 65% reduction in energy use. The building was recognized as "exemplary" by the San Diego Chapter of the American Institute of Architects and won the prestigious 1996 National Public Technology Award for Sustainable Development.

"We're already seeing that our estimated annual savings of \$13,000 are on target. The City will recoup its investment in two and a half years."

George Locher, Jr. Project Engineer **Cuyahoga Falls, Ohio** 







Over 30 cities joined Rebuild America through a partnership formed in 1995 with the U.S. Conference of Mayors.

#### **Protect the Environment**

Rebuild America partnerships do more than just celebrate the environment on Earth Day.

Mayor Bill Campbell of **Atlanta**, **Georgia**, declared a year of energy savings for the city, stressing that, "Energy is more than a policy issue. It's about the future for children and the environment."



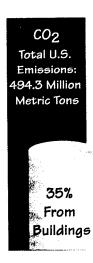
#### The City of Philadelphia

held a signing ceremony on Earth Day to announce their Rebuild America partnership and a program to incorporate renewable energy sources in building renovation and construction projects. They're also hosting a national training workshop for public energy managers on the use of renewable energy systems for neighborhood revitalization.



### Buildings are a leading source of environmental pollution in the United States









Lancaster, Pennsylvania, is showcasing the adaptive reuse of historic buildings by renovating Excelsior Hall, which is listed on the National Register of Historic Places.

## Partnerships In Action: State Governments

Over half of the states have already formed Rebuild America partnerships. Typically working out of state energy offices, these partnerships work with local governments, businesses, and community groups to improve economic performance and enhance the quality of life in their communities.

They all see the tangible benefits of energy efficiency.

#### **Lower Energy Costs**

The State of Alaska is helping over 200 small. rural communities save 25-30% on their fuel costs through lighting and system upgrades. A typical school, often the largest building in a village, can save \$15,000 a vear.

#### **Economic** Development

Rebuild Colorado expects to generate \$175.6 million in private-sector community investment, creating over 7,000 jobs and saving \$35 million a year in energy costs. They've partnered with private companies and public agencies to create sample performancebased contracts that can be used for buildings throughout the state.

#### Job Creation

"Rebuild Colorado will

private building owners

turn energy waste into a

new source of capital."

Linda Smith

Coordinator

Rebuild Colorado

help both state and

The 60 local partners of Rebuild Nebraska are at work in over 100 buildings, where energy efficiency projects will result in dozens of new jobs. They're educating a new generation of energy professionals by

> co-sponsoring Energy Week in western Nebraska high schools.

#### A Cleaner **Environment**

#### Connecticut's Office of **Policy and Management**

worked with the state legislature to approve \$900,000 from a pollution prevention fund for local Rebuild America partnerships. Five communities received grants to bring energy efficiency to local schools, multifamily

housing and public buildings. "Any money that can be saved with regard to utility costs will go to help students," is how West Haven Superintendent of Schools George Palermo put it. The city expects to save \$350,000 on schools

alone.

Buildings



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Over half or the action of the many cerritorial governments had formed Rebuild America partnerships by 1997.

### Partnerships In Action: Schools and Universities



"By upgrading the [computer] control system, the school will better manage its resources and save money."

Rebuild Wisconsin partner Scott Olsen, State Program Manager of the Wisconsin Energy Initiative-2

### A Better Learning and Working Environment

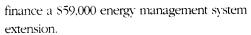
While colleges and universities spend \$17.5 billion every year on maintenance, operations, and construction, there is a \$70 billion backlog of deferred maintenance and facilities renewal, according to **APPA: The Association of Higher Education Facilities Officers.** 

APPA and Rebuild America formed a partnership in 1996 to provide universities with a way to update aging infrastructure, improve the learning environment, and increase the money available for other priorities. Over a dozen universities are already hard at work.

"Being a Rebuild America partner provides a source of ideas and contacts to help us move to a more efficient environment," says Robert Rowan, assistant vice president of the **University of Maryland at Baltimore.** The university, which renovates 30,000 to 50,000 square feet annually and is in the midst of a 10-year capital construction program, expects new and renovated buildings to be 20-30% more efficient than their counterparts. They are also better equipped to handle the profusion of computers and other electronic technology being installed.

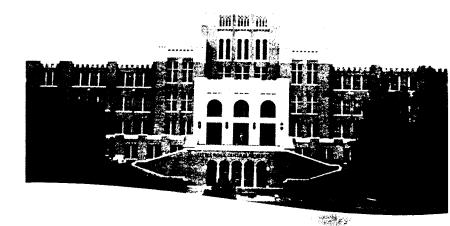
### Better Schools = Better Students

**Rebuild Wisconsin** joined forces with the Wisconsin Energy Initiative-2 to retrofit school buildings in over 300 school districts in Wisconsin. They helped the Cornell School District arrange a lease-purchase contract to



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The school board of Little Rock, Arkansas, conducted energy audits of Central High School to save money and energy through building improvements. The school board is a partner in the city's Rebuild America program, along with the University of Arkansas and several private companies.





The Ohio Foundation for independent Colleges is a Rebuild America partner with 36 members.

# Partnerships In Action: Community and Economic Development Agencies

### Energy Efficiency for the 21st Century

Located around the corner from the home of Paul Revere, the Northeast Energy Efficiency Council is a non-profit community group that leads the **Rebuild Boston** partnership. They have over 100 member companies that support Rebuild Boston's energy efficiency activities.



Rebuild Boston is providing technical consulting to the Boston Housing Authority to treat over 9,000 housing units and generate an investment of over \$41 million in energy efficiency improvements.

They're also helping the City of Boston develop a comprehensive energy management program for the city's \$40 million annual energy budget.

Rebuild Boston's goals include \$40 million of community investment and \$10 million in procurement alliances over five years, as well as a plan for sustaining the program into the 21st century.

"Rebuild America will put money back in the community and back in the private sector by creating jobs and saving companies money they spend on energy bills. This will increase the profitability and competitiveness of local businesses."

Cyane Dandridge
Executive Director
ReEnergize East Bay
with Mayor Elihu Mason Harris
of Oakland, California



Southeast Development, Inc., of Baltimore, Maryland, is helping audit and retrofit homes in historic neighborhoods, improving the quality of life while preserving the character of the city.

### Partnerships In Action: Housing Authorities

Rebuild America offers housing authorities access to expertise to help lower their operations and maintenance costs while increasing resident satisfaction. Rebuild America helps partnerships develop an upgrade strategy acceptable to management, oversight committees, and tenants.

### Saving Money and Energy

The Chicago Housing

Authority expects to save

\$750,000 a year by installing

30,000 efficient refrigerators.

and is using project savings

to pay for the new
equipment. Rebuild America
is helping them do it by
collecting energy usage data
before and after the refrigerators were
installed.

Residents stay involved through an innovative U.S. Department of Energy program that trains them to perform energy-efficient maintenance, including caulking, weather stripping, and fixing leaky faucets and showerheads.



"It's extremely rewarding to work with Rebuild America as we develop projects and get the best return on our investment. We plan to cut energy consumption by 30 percent in half of our units by 2000."

Dave Anderson Energy Manager Chicago Housing Authority

#### Working for Managers and Tenants

Students from Chadron High School and the University of Nebraska-Lincoln are helping **Rebuild Nebraska** and the Chadron Housing Authority.

The students, accompanied by energy engineers, have conducted energy audits, including examining lighting, testing furnaces and water heaters, and checking for air leaks around doors and windows.

"The energy audits will be used to plan capital improvements designed to ensure the complexes are energy efficient for the tenants as well as the Authority. This is a great benefit to us to have the expertise of a state agency in ensuring our complexes are meeting the needs of our tenants," said Karen Eisenbarth, Chadron Housing Authority's executive director.





The Energy collaborative in Toledo, Ohio, is using energy efficiency as a catalyst for economic growth in six downtown neighborhoods, where they will create over two dozen jobs.

#### **Energy Efficiency Benefits Everyone**

You can join over 160 other partnerships to make a real difference in your community. Partnerships know that generating private and public investment in buildings pays off.

- Save money Buildings that use less energy cost less to own and operate.
- Promote growth Infrastructure improvements bring businesses back downtown and spur new economic growth.
- Create jobs New business activity means new jobs for local residents.
- Protect the environment Reducing energy use cuts power plant pollution.

#### Join Rebuild America

Joining Rebuild America is the first step in carrying out a successful community energy efficiency program. When you join, the U.S. Department of Energy agrees to:

- Assign a program representative to help you develop and carry out your program.
- Communicate successful partnership ideas and methods.
- Sponsor workshops on applicable energy, business, finance, and organizational topics.
- Promote exchanges of information among partnerships.



"[Rebuild America] will bring many benefits to the community — capital improvements, economic stimulus, cleaner air — as well as energy savings and greater living comfort to our customers."

Tony Harris, Vice President, Western Region and California Sales, **PG&E Energy Services** in San Francisco

- Recognize your partnership as an active participant in Rebuild America.
- Promote partnership activities nationwide.

#### **Energize Your Community**

When you join Rebuild America, you agree to:

- Lead the formation of a community partnership.
- Develop an action plan which identifies your goals.
- Promote your participation in Rebuild America.

To get an application, call 1-800-DOE-EREC (TDD 1-800-273-2957) or visit the Rebuild America web site at www.eren.doe.gov/buildings/rebuild/.

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U.S. Department of Energy
Office of Building Technology, State and Community Programs
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Rebuild America is part of DOE's Buildings for the 21st Century. If you would like information about the other Energy Efficiency and Renewable Energy programs and resources, call 1-800-DOE-EREC or visit www.eren.doe.gov.



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