



Department of Energy Recovery Act State Memos

West Virginia



For questions about DOE's Recovery Act activities, please contact the DOE Recovery Act Clearinghouse:
1-888-DOE-RCVY (888-363-7289), Monday through Friday, 9 a.m. to 7 p.m. Eastern Time
<https://recoveryclearinghouse.energy.gov/contactUs.htm>.

All numbers and projects listed as of June 1, 2010

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American Recovery and Reinvestment Act

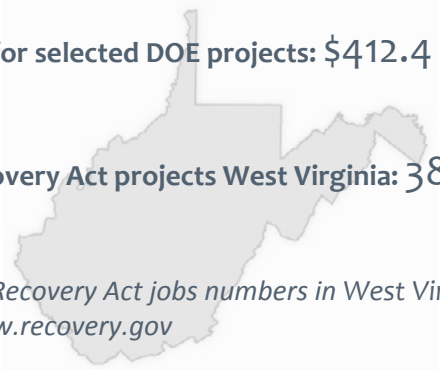


U.S. DEPARTMENT OF ENERGY • WEST VIRGINIA RECOVERY ACT SNAPSHOT

Funding for selected DOE projects: \$412.4 million

DOE Recovery Act projects West Virginia: 38

For total Recovery Act jobs numbers in West Virginia go to www.recovery.gov



West Virginia has substantial natural resources, including coal and hydroelectric power. **The American Recovery & Reinvestment Act (ARRA)** is making a meaningful down payment on the nation's energy and environmental future. The Recovery Act investments in West Virginia are supporting a broad range of clean energy projects, from energy efficiency and the smart grid, to carbon capture and storage, transportation electrification, and the National Energy Technology Laboratory in Morgantown. Through these investments, West Virginia's businesses, West Virginia University, the National Energy Technology Laboratory, non-profits, and local governments are creating quality jobs today and positioning West Virginia to play an important role in the new energy economy of the future.

EXAMPLES OF WEST VIRGINIA FORMULA GRANTS

Program	State Energy Program	Weatherization Assistance Program	Energy Efficiency Conservation Block Grants	Energy Efficiency Appliance Rebate Program
Award (in millions)	\$32.7 The West Virginia Division of Energy has received \$32.7 million in State Energy Program funds to invest in state-level energy efficiency and renewable energy priorities.	\$37.6 The State of West Virginia has received \$37.6 million in Weatherization Assistance Program funds to scale-up existing weatherization efforts in the state, creating jobs, reducing carbon emissions, and saving money for West Virginia's low-income families. Over the course of the Recovery Act, West Virginia expects to weatherize nearly 3,600 homes. The program also includes workforce training and education as part of the state's efforts to develop a green workforce.	\$14 Twenty-one communities in West Virginia has received a total of \$14 million for Energy Efficiency and Conservation Block Grants (EECBG) to develop, promote, implement, and manage local energy efficiency programs.	\$1.7 The West Virginia Department of Environmental Protection has received \$1.7 million for the Energy Efficient Appliance Rebate Program, which offers consumer rebates for purchasing certain ENERGY STAR® appliances. These energy efficient appliances reduce energy use and save money for families, while helping the environment and supporting the local economy.

EXAMPLES OF WEST VIRGINIA COMPETITIVE GRANTS AND TAX CREDITS

Award	\$306.4 million American Electric Power in New Haven has been awarded \$306.4 million to demonstrate 90 percent removal of carbon dioxide from the flue gas stream at the Mountaineer Plant using the Alstom Chilled Ammonia Process.	\$6.9 million West Virginia University in Morgantown has been awarded \$6.9 million for electric drive vehicle education.
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Funding Allocation Table (Figure 1)

Total dollar amounts in this document are accurate as of June 1, 2010. Please note that Recovery Act Programs are ongoing and the dollar amounts are subject to change. Recipient locations are based on project sites rather than recipients' headquarters locations.

Recovery Act Pillar	Flagship Program Names & Funding Type ¹	Number of Selections	Selected Amount (in millions) ²
Energy Efficiency	<i>Weatherization Assistance Program (F)</i>	1	\$37.6
	<i>State Energy Program (F)</i>	1	\$32.7
	<i>Energy Efficiency and Conservation Block Grant (F)</i>	21	\$14.0
	<i>Energy Efficient Appliance Rebate (F)</i>	1	\$1.7
	<i>Building Energy Efficiency (CM)</i>	3	\$9.7
	<i>Industrial Energy Efficiency (CM)</i>	2	\$0.6
	<i>Additional Programs (CM & C)</i>	2	\$1.0
	TOTAL Energy Efficiency	31	\$97.3
Renewable Energy	<i>Geothermal (CM)</i>	1	\$1.2
	TOTAL Renewable Energy	1	\$1.3
Electric Grid	<i>State and Local Energy Assurance and Regulatory Assistance (F)</i>	2	\$1.2
	TOTAL Electric Grid	2	\$1.2
Transportation	<i>Transportation Electrification (CM)</i>	1	\$6.9
	TOTAL Transportation	1	\$6.9
Carbon Capture and Storage	<i>CCS Projects (CM)</i>	2	\$305.5
	TOTAL Carbon Capture and Storage	2	\$305.5
Science and Innovation	<i>Small Business Research (SBIR/STTR) (CM)</i>	1	\$0.2
	TOTAL Science and Innovation	1	\$0.2
TOTAL - DOE Programs		38	\$412.4
¹ F=Formula Grant, CM=Competitive Grant, C=Contract			
² "Selected" indicates DOE has selected a potential funding recipient, which begins the process of negotiating an agreement. This does not necessarily indicate that a final agreement has been reached.			
³ Total does not include administrative funds.			

ENERGY EFFICIENCY – 31 projects totaling \$97.3 million

Helping millions of American families cut utility bills by making homes and appliances more energy efficient, expanding the home efficiency industry in sales and manufacturing. For more information, visit <http://www.energy.gov/recovery/energyefficiency.htm>.

Award(s): \$37.6 million, Weatherization Assistance Program (WAP)

Location: Statewide

West Virginia received \$37.6 million in Weatherization Assistance Program (WAP) funds to scale-up existing weatherization efforts in the state, creating jobs, reducing carbon emissions and saving money for West Virginia's low-income families. Over the course of the Recovery Act, West Virginia expects to weatherize nearly 3,600 homes. The program also includes workforce training and education as part of the state's efforts to develop a green workforce. The West Virginia Weatherization Assistance Program works with existing community action associations around the state to target low-income communities that have benefited from weatherization programs before, as well as reaching previously underserved communities. The program conducts initial energy audits by using activity priority lists developed through audits of a representative sample of homes. The state monitors the program's progress with monthly tracking reports from implementation partners and a tracking database for every region participating in the program. The state also funds training for Energy Educators who spend time in the field educating customers about better energy consumption behaviors.

Award(s): \$32.7 million, State Energy Program (SEP)

Location: Statewide

The West Virginia Division of Energy received \$32.7 million in State Energy Program funds to invest in state-level energy efficiency and renewable energy priorities. West Virginia is using its Recovery Act State Energy Program (SEP) funding to implement six programs to improve energy efficiency in state buildings. These programs fund upgrades in state administrative office buildings, correctional facilities, hospitals, long-term and acute health care facilities, laboratories, schools, colleges and universities and armories. Upgrades include replacing or improving lighting systems, windows, HVAC systems, boilers and control systems. West Virginia is also creating the Energy Efficiency for Businesses Revolving Loan Program to provide financial assistance to businesses to support energy efficiency investments. Recovery Act SEP funding is also supporting a Green Collar Jobs Training program to provide West Virginians with the education, training and skills certification necessary for employment in the fields of energy efficiency and renewable energy.

Award(s): 21 totaling \$14 million, Energy Efficiency and Conservation Block Grant Program (EECBG)

Location: Statewide

Recipients: Beckley, Berkeley, Cabell, Charleston, Fairmont, Martinsburg, Clarksburg, Harrison County Commissioners, Inc., Huntington, Jefferson, Kanawha, Mercer Monongalia County, Morgantown, Parkersburg, Putnam, Raleigh, Weirton, West Virginia Division of Energy, Wheeling, Wood

Twenty-one communities in West Virginia received a total of \$14 million for the Energy Efficiency and Conservation Block Grants Program (EECBG) to develop, promote, implement and manage local energy efficiency programs.

This project assists states, U.S. territories, Indian tribes, counties and cities to develop, promote, implement and manage localized energy efficiency programs through individual program grants. The project funds programs which reduce fossil fuel emissions in a manner that is environmentally sustainable and maximizes cost savings, reduces the total energy use of eligible entities and improves energy efficiency in the transportation, building and other appropriate sectors.

Award(s): \$1.7 million, Energy Efficient Appliance Rebate Programs

Location: Statewide

The West Virginia Department of Environmental Protection has received \$1.7 million for the Energy Efficient Appliance Rebate Program, which offers consumer rebates for purchasing certain ENERGY STAR® appliances. These energy efficient appliances reduce energy use and save money for families, while helping the environment and supporting the local economy. The State of West Virginia is implementing a mail-in rebate program to help residents replace older, inefficient appliances with ENERGY STAR qualified appliances. Consumers increase rebate amounts for appliances by purchasing models which are more efficient than the current ENERGY STAR models. Eligible products include refrigerators, freezers, clothes washers, dishwashers and room air conditioners.

Award(s): \$1.2 million, Advanced Building Systems

Location: Morgantown

Keylogic Systems, Inc., in Morgantown received \$1.2 million to accelerate building technology research and development through more efficient energy-saving technologies.

Award(s): 2 totaling \$8.6 million, Buildings and Appliance Market Transformation

Location: Morgantown

The Buildings and Appliance Market Transformation project expands building codes, accelerates the pace of Appliance Standard test procedure development and improves the efficiency of commercial buildings' operations by training building operators and commissioning agents.

- **URS Energy & Construction, Inc., Morgantown - \$8.4 million**
- **Keylogic Systems, Inc., Morgantown - \$120,000**

Award(s): 2 totaling \$983,000, Enhance and Accelerate FEMP Service Functions to the Federal Government

Location: Morgantown

- **Keylogic Systems, Inc., Morgantown - \$908,000**
Keylogic Systems, Inc., in Morgantown received \$908,000 to provide logistical and administrative support services to federal staff for acquisition planning, management and execution.
- **Leonardo Technologies, Inc., Morgantown - \$75,000**
Leonardo Technologies, Inc., in Morgantown received \$75,000 to provide technical assistance for federal agencies.

Award(s): 2 totaling \$636,000, Industrial Assessment Centers and Plant Best Practices

Location: Charleston, Morgantown

- **West Virginia Division of Energy, Charleston - \$500,000**
West Virginia Division of Energy in Charleston received \$500,000 in funding. This project deploys multiple pathways to reduce energy intensity and assist industrial manufacturing to operate more efficiently. Activities include enhanced assessments, enhanced post assessment follow-up to promote the adoption of energy management best practices, effective plant personnel training and building knowledge of energy efficiency measures at all skill levels.
- **West Virginia University Research Corporation, Morgantown - \$136,000**
West Virginia University Research Corporation in Morgantown received \$136,000 in funding. This project provides eligible small- and medium-sized manufacturers with no-cost energy assessments and serves as a training ground for the next generation of energy-savvy engineers.

RENEWABLE ENERGY – 1 project totaling \$1.3 million

Developing clean renewable resources to double our supply of renewable energy and boost domestic renewable manufacturing capacity. For more information, visit <http://www.energy.gov/recovery/renewableenergy.htm>.

Award(s): \$1.2 million, Enhanced Geothermal Systems (EGS) Technology R&D

Location: Morgantown

West Virginia University Research Corporation in Morgantown received \$1.2 million to examine utilization of low-temperature geothermal resources.

MODERNIZING THE ELECTRIC GRID – 2 projects totaling \$1.2 million

Harnessing clean energy sources and integrating them onto a modernized electric grid, while giving consumers better choices and more control over their energy use. For more information, visit <http://www.energy.gov/recovery/smartgrid.htm>.

Award(s): \$366,000, Enhancing State and Local Governments' Energy Assurance

Location: Charleston

The West Virginia Division of Energy in Charleston received \$366,000 for State Energy Assurance Planning. This project focuses on building regional energy assurance capability by enhancing inter- and intra- state coordination and cooperation during energy emergencies. The project funds states to update or develop State Energy Assurance Plans incorporating new energy portfolios such as wind, renewables and biofuels. The project also funds cities to update or develop Local Energy Assurance Plans. The two sets of funding are used to hire or retrain staff to build in-house expertise in dealing with Smart Grid technologies, critical energy infrastructure interdependencies and cyber-security.

Award(s): \$796,000, State Assistance on Electricity Policies

Location: Charleston

The Public Service Commission of West Virginia in Charleston received \$796,000 to assist in addressing its Recovery Act electricity workload by hiring staff trained to facilitate the review of time-sensitive requests approving electric utility expenditures.

TRANSPORTATION – 1 project totaling \$6.9 million

Investing in a new generation of advanced fuels and vehicles to reduce our dependence on foreign oil and revitalize domestic manufacturing. For more information, visit <http://www.energy.gov/recovery/vehicles.htm>.

Award(s): \$6.9 million, Transportation Electrification

Location: Morgantown

West Virginia University in Morgantown received \$6.9 million for electric drive vehicle education. The educational programs serve graduate, undergraduate and secondary students, teachers, technicians, emergency responders and the general public.

CARBON CAPTURE AND STORAGE – 2 projects totaling \$305.5 million

Developing clean coal technologies so we can utilize America's coal resources sustainably. For more information, visit <http://www.energy.gov/recovery/ccs.htm>.

Award(s): \$305 million, Expand and Extend Clean Coal Power Initiative Round III

Location: New Haven

American Electric Power in New Haven received \$305 million to demonstrate 90 percent removal of carbon dioxide from a 235 MW equivalent flue gas stream from the Mountaineer Plant using the Alstom Chilled Ammonia Process. 1.5 million Metric tons of carbon dioxide are being captured and sequestered in two saline formations located near the plant. Part of the funding for this project comes from prior year Fossil Energy (FE) funds.

Award(s): \$518,000, Industrial Carbon Capture and Storage Applications

Location: Triadelphia

Touchstone Research Laboratory in Triadelphia received \$517,818 to lead the cultivation of algae with combustor flue gas carbon dioxide. The project utilizes novel phase-change material to enclose outdoor ponds for harvest and conversion to biocrude feedstock via zooplankton consumption of algae and subsequent processing for lipid extraction and refining.

SCIENCE AND INNOVATION – 1 project totaling \$150,000

Renewing our commitment to science and innovation to ensure global competitiveness in the future. For more information, visit <http://www.energy.gov/recovery/innovation.htm>.

Award(s): \$150,000, Small Business Innovation Research (SBIR) / Small Business Technology Transfer (STTR) Round 1

Location: Triadelphia

Touchstone Research Laboratory in Tridelphia received \$150,000 to support Small Business Innovation Research (SBIR) / Small Business Technology Transfer (STTR) programs. DOE strives to maintain a strong and appropriately balanced core research program by supporting R&D at universities, the DOE national laboratories and small businesses. With this award, Touchstone Research Laboratory is working to develop a new industrial high-temperature furnace insulation material that will dramatically decrease heat loss and reduce energy and maintenance costs.

ENERGYEMPOWERS.GOV

Recovery Act Success Stories

Energy Empowers is a U.S. Department of Energy clean energy information service. Our team produces stories featuring the people and businesses that are fueling the energy transformation and economic recovery in America. For more stories from your state, go to energyempowers.gov/WestVirginia



William Loope's ensures the workforce has the tools to be successful. He's involved in green jobs training courses and plans to incorporate a degree program into the curriculum. Lisa Hatcher, an allied health specialist at New River, believes in weatherization work because of the associated health and safety benefits, in addition to saving energy. | Photos courtesy Rick Barbero

LEWISBURG

Training changing face of West Virginia's workforce

New River Community and Technical College is training the workforce — and new trainers — in home weatherization techniques. With 3,700 homes slated to be weatherized in West Virginia under the Recovery Act, educating enough trainers to teach the workforce is a daunting challenge. A goal, the community colleges are eager to meet.

West Virginia's stimulus funding is expected to spur green jobs and build skills for the future in a state that relies on a nonrenewable energy source — coal — to employ 35,000 members of its workforce. New River is gearing up to educate the state's new clean energy workers, who will go on to help residents implement energy efficiency measures and maybe even someday install renewable energy systems. Greg Perry, owner of a building company, is taking these classes to help his company compete in the marketplace because he's no longer building scores of new homes like he once did.

"I'm looking for a new niche market, and I also feel pretty strongly about making an effort to reduce our carbon footprint," Greg says. "The new home market around here dried up and people are holding on to what they have, so there are some opportunities do to retrofits that save energy."

William Loope, a vice president at New River responsible for workforce education, agrees.

"This training will not only change the landscape of our workforce,

but also it'll change the ability of West Virginians to deploy more of their financial resources into the local economy," he says. "So green jobs are truly a stimulus here because it's not just creating something in the short-term, it's also creating long-term effects by training workers in a job market that will be there for a long time."

HUNTINGTON

West Virginia agency increases staff to meet weatherization needs

In the river city of Huntington, W.Va., there exists an eclectic brand of people, ranging from college students and businessmen to steel workers and coal miners. The city sits along the banks of the Ohio River. Like other cities, though, unemployment has taken its toll.

One 25-year-old resident there, Dan Hardy, has worked his entire life make life better for others. He became unemployed for about eight months after his plumbing and auto repair jobs disappeared. He didn't have much luck finding a job until the weatherization program at Southwest Community Action Council (SCAC) in Huntington, W.Va., called him for an interview.

SCAC provides Cabell, Lincoln, Mason and Wayne counties with weatherization assistance. For its first year of weatherization funding under the Recovery Act, SCAC's funding went up to \$2.7 million and its responsibility for home weatherization increased from 155 to 365 units. This increase in funding and homes being served led the community action agency to increase its staff from nine to 30 workers.

"Last year, we had just two crews working two counties a piece. This year we were able to put a crew in each county, which means more people are getting services quicker than ever before, which makes them happier," Connie Sherrill, weatherization coordinator at SCAC, says. "This money is really great because a lot of people who came on board with our program didn't have jobs before or if they did, they were minimum wage jobs that made it more difficult for them to support themselves or their families."

Dan was one of those people looking for work. Now he enjoys his employment as a weatherization crew technician, helping make West Virginians' homes more energy-efficient through weatherization, which includes various processes such as installing energy-efficient windows, insulation or heating and cooling equipment that uses less energy.

"I had done much of this kind of work before already, so it was an easy transition," Dan says. "I've learned a lot from my crew supervisor too because he has run a lot of crews in his life and has lots of experience in this field."

Dan was doing "whatever was necessary to make a living," he says. But now, he's glad to have a steady job where he's learning new job skills in the green collar workforce.