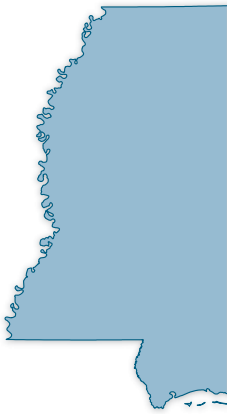
Department of Energy

Recovery Act State Memos

Mississippi



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 • MISSISSIPPI RECOVERY ACT SNAPSHOT

Funding for selected DOE projects: $279.2 million

DOE Recovery Act projects in Mississippi: 37

Clean energy tax credits and grants: 2

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

Mississippi has substantial natural resources, including biomass, oil, coal, and natural gas. **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 Mississippi are supporting a broad range of clean energy projects, from energy efficiency and the smart grid to advanced biofuels. Through these investments, Mississippi's businesses, universities, national labs, non-profits, and local governments are creating quality jobs today and positioning Mississippi to play an important role in the new energy economy of the future.

EXAMPLES OF MISSISSIPPI FORMULA GRANTS

Program	State Energy Program	Weatherization Assistance Program	Energy Efficiency Conservation Block Grants	Energy Efficiency Appliance Rebate Program
Award (in millions)	$40.4	$49.4	$17.2	$2.8
	The Mississippi Development Authority has received $40.4 million in State Energy Program funds to invest in state-level energy efficiency and renewable energy priorities.	The State of Mississippi has received $49.4 million in Weatherization Assistance Program funds to scale-up existing weatherization efforts in the state, creating jobs, reducing carbon emissions, and saving money for Mississippi's low-income families. Over the course of the Recovery Act, Mississippi expects to weatherize nearly 5,500 homes. The program also includes workforce training and education as part of the state's efforts to develop a green workforce.	Twenty-three communities in Mississippi received a total of $17.2 million for Energy Efficiency and Conservation Block Grants (EECBG) to develop, promote, implement, and manage local energy efficiency programs.	The Mississippi Development Authority has received $2.8 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 MISSISSIPPI COMPETITIVE GRANTS AND TAX CREDITS

Award	$81.1 million	$30.6 million	$2.6 million	$1.6 million
	Bluefire LLC, in Fulton, was awarded **$81.1 million** to construct a facility that produces ethanol fuel from woody biomass, mill residue, and sorted municipal waste.	The **South Mississippi Electric Power Association (SMEPA)** was awarded a **Smart Grid Investment Grant** for **$30.6 million** to install 240,000 smart meters and smart grid infrastructure across a range of SMEPA's member cooperatives, covering approximately two-thirds of Mississippi.	**Mississippi Power Company** in Gulfport has been awarded **$2.6 million** for **Smart Grid Workforce Training**. The project provides classroom and hands-on training for line workers, electricians, technicians, engineers, planners, and operators.	**Forrest County** was awarded **$1.6 million** for **Ground Source Heat Pumps**. The funds will be used to install a heating/cooling system at a prison facility, saving taxpayer money on the facility's energy bills.

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	*Weatherization Assistance Program (F)*	1	$49.4
	State Energy Program (F)	1	$40.4
	Energy Efficiency and Conservation Block Grant (F)	23	$17.2
	Energy Efficient Appliance Rebate (F)	1	$2.8
	Industrial Energy Efficiency (CM)	2	$1.0
	Additional Programs (CM & C)	1	$1.6
	TOTAL Energy Efficiency	29	$112.4
Electric Grid	*Smart Grid Investment and Demonstrations Project (CM)[3]*	1	$30.6
	State and Local Energy Assurance and Regulatory Assistance (F)	2	$1.3
	Smart Grid Workforce Training (CM)	2	$3.3
	TOTAL Electric Grid	5	$35.2
Transportation	*Advanced Fuels (CM)*	2	$131.1
	TOTAL Transportation	2	$131.1
Carbon Capture and Storage	*CCS Projects (CM)*	1	$0.5
	TOTAL Carbon Capture and Storage	1	$0.5
TOTAL - DOE Programs[4]		**37**	**$279.2**
Tax Credits/ Payments[5]	*Payments for Renewable Energy Generation in Lieu of Tax Credits (1603)*	2	$0.1
	TOTAL Tax Incentives	2	$0.1
TOTAL - DOE/Treasury + DOE		**39**	**$279.3**

[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]Projects may cross state boundaries, signifies HQ location.

[4]Total does not include administrative funds.

[5]Jointly administered by DOE and the U.S. Department of Treasury.

ENERGY EFFICIENCY – 29 projects totaling $112.4 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): $49.4 million, Weatherization Assistance Program (WAP)
Location: Statewide
Mississippi received $49.4 million in Weatherization Assistance Program funds to scale-up existing weatherization efforts in the state, creating jobs, reducing carbon emissions and saving money for Mississippi's low-income families. Over the course of the Recovery Act, Mississippi expects to weatherize nearly 5,500 homes. The program also includes workforce training and education as part of the state's efforts to develop a green workforce.

Award(s): $40.4 million, State Energy Program (SEP)
Location: Statewide
The Mississippi Development Authority received $40.4 million in State Energy Program funds to invest in state-level energy efficiency and renewable energy priorities. Mississippi is initiating a "lead by example" program to enhance energy efficiency in state buildings, including the installation of advanced smart meters that monitor real-time energy consumption. Smart meters gather energy data at timed intervals and identify equipment problems promptly; they are being installed in various state agencies. This grant is also funding building retrofits that reduce energy consumption. In addition, Mississippi is designing and implementing pilot projects for renewable energy installations. These installations target several sectors, including commercial, industrial, and residential and transportation. On a competitive basis, this program provides incentives to entities expanding or building facilities that produce energy or transportation fuels from biomass, solar or wind resources.

Award(s): 23 totaling $17.2 million, Energy Efficiency and Conservation Block Grant Program (EECBG)
Location: Statewide
Recipients: Mississippi State Energy Office, Olive Branch, Greenville, Southaven, Tupelo, Meridian, Hinds County, Biloxi, Warren County, Pearl River County, Lowndes County, Harrison County, Mississippi Band of Choctaw Indians, Jones County, DeSoto County, Madison County, Hattiesburg, Jackson County, Rankin County, Gulfport, Jackson

Twenty-three communities in Mississippi received a total of $17.2 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, 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): $2.8 million, Energy Efficient Appliance Rebate Programs
Location: Statewide
The Mississippi Development Authority received $2.8 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. This funding assists state-level rebate programs by paying up to 50 percent of the administrative costs of establishing and executing these types of programs. Though states and territories determine the appliances which apply, typically those include clothes washers, dishwashers, refrigerators, freezers, air conditioners and water heaters.

Award(s): $1.6 million, Ground Source Heat Pumps
Location: Forrest County
Forrest County received $1.6 million to install a Ground Source Heat Pump (GHP) heating / cooling system at a prison facility. This installation reduces utilities costs and increases GHP visibility.

Award(s): 2 totaling $1 million, Industrial Assessment Centers and Plant Best Practices
Location: Jackson, Starkville

- **Mississippi Development Authority - Energy Division, Jackson - $867,000**
  The Mississippi Development Authority - Energy Division in Jackson is building partnerships through its Industrial Advisory Board to reduce energy use in the industrial and manufacturing sectors.

- **Mississippi State University, Starkville - $150,000**
  Mississippi State University in Starkville is providing eligible small and medium-sized manufacturers with no-cost energy assessments and serving as a training ground for the next generation of energy-savvy engineers.

RENEWABLE ENERGY – 2 projects totaling $134,000

Developing the clean renewable resources in order 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): 2 payments totaling $134,000 from DOE / Treasury, 1603 Payments for Renewable Energy Generation
Location: Osyka, Carthage
*For current number of 1603 awards, see the weekly update at http://www.treas.gov/recovery/1603.shtml

- **Shafer Farms, Osyka - $116,000**
  Shafer Farms in Osyka received $116,000 for a biomass project.

- **Spencer Pope Farms, Carthage - $18,000**
  Spencer Pope Farms in Carthage received $18,000 for a solar electricity project.

MODERNIZING THE ELECTRIC GRID – 5 projects totaling $35.2 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): $470,000, Enhancing State and Local Governments' Energy Assurance
Location: Jackson
The Mississippi Development Authority received $470,000 to focus on building regional energy assurance capabilities by enhancing inter- and intra-state coordination and cooperation during energy emergencies. This project funds states to update and develop State Energy Assurance Plans that incorporate new energy portfolios such as wind, renewables, biofuels, etc. This program also funds cities updating and developing Energy Assurance Plans within local areas. The two sets of funding are being used to hire or retrain staff, building in-house expertise in the areas of Smart Grids, critical energy infrastructure interdependencies and cyber-security.

Award(s): $30.6 million, Smart Grid Investment Grant Program (EISA 1306)
Location: Statewide
The South Mississippi Electric Power Association (SMEPA) received a Smart Grid Investment Grant for $30.6 million to install a Smart Grid infrastructure and 240,000 smart meters across a range of SMEPA's member cooperatives. This installation covers approximately two-thirds of Mississippi.

Award(s): 2 totaling $3.3 million, Smart Grid Workforce Training
Location: Gulfport, Perkinston

- **Mississippi Power Company, Gulfport - $2.6 million**
  Mississippi Power Company in Gulfport received $2.6 million for Smart Grid Workforce Training. The project provides classroom and hands-on training for line workers, electricians, technicians, engineers, planners and operators.

- **Mississippi Gulf Coast Community College, Perkinston - $729,000**
  Mississippi Gulf Coast Community College in Perkinston received $729,000 to prepare the Gulf region workforce to implement and maintain a clean-energy and "intelligent" electric system. Over 360 students and incumbent workers, 100 postsecondary and STEM secondary educators and 400 secondary students are engaging in training, education and career awareness activities.

Award(s): $825,000, State Assistance on Electricity Policies
Location: Jackson
The Mississippi Public Service Commission in Jackson received $825,000 for State Assistance on Electricity Policies. This project funds states and their Public Utility Commissions (PUCs) to hire staff trained to facilitate the review of time-sensitive requests approving electric utility expenditures undertaken as part of the Recovery Act.

TRANSPORTATION – 2 projects totaling $131.1 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): $81.1 million, Commercial Scale Biorefinery Projects
Location: Fulton
Bluefire, LLC, in Fulton received $81.1 million to construct a facility that produces ethanol fuel from woody biomass, mill residue and sorted municipal waste.

Award(s): $50 million, Modify Integrated Biorefinery Solicitation Program for Pilot and Demonstration Scale Biorefineries
Location: Pontotoc

Enerkem Corporation received $50 million to build and operate a 300 tonne-per-day biorefinery in Pontotoc that uses the dried and sorted biomass fraction of municipal solid waste (MSW) as feedstock. The Enerkem technology platform is based on a state-of-the-art gasification system coupled with a proprietary gas cleaning and conditioning process. The product of Enerkem's thermo-chemical process is a synthetic gas of sufficient purity and composition stability to be transformed, via catalysis, into transportation fuels and bio-chemicals.

CARBON CAPTURE & STORAGE – 1 project totaling $542,000

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): $542,000, Industrial Carbon Capture and Storage Applications
Location: Moss Point
Leucadia Energy, LLC, in Moss Point received $542,000 for Industrial Carbon Capture and Storage Applications. This project demonstrates technologies that capture and sequester carbon dioxide emissions from an industrial source. Mississippi Gasification, LLC, a Leucadia affiliate, is building a petcoke-to-substitute natural gas plant that demonstrates large-scale recovery, purification and compression of four million tons of carbon dioxide per year.

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/Mississippi

11 Navy sites to save $871,000 yearly

The U.S. Navy's Naval Facilities Engineering Command (NAVFAC) Southeast - based in Jacksonville, Fla. - is using $69.3 million in funding from the American Recovery and Reinvestment Act to install solar energy systems and upgrade a total of 32 buildings at 11 naval installations across Florida, Mississippi and Texas.

Through this project, the buildings are getting solar and roofing upgrades that will save the Navy $871,935 annually. The solar energy systems are expected to generate 9,399 MWh of clean, renewable energy during first full year after construction. The process will involve hundreds workers across the projects.

Navy Project Manager and Electrical Engineer Lynwood Taylor is overseeing the entire process to make sure the Navy spends its money in ways that will progress the military toward its energy goals, create private-sector jobs and reduce dependence on foreign oil.

Upgrading roofs, integrating solar

At the Naval Construction Battalion Center in Gulfport, Miss., six buildings are slated to see roof upgrades that include a total of 500 kW of building-integrated photovoltaics using almost $7 million of the $13.8 million awarded for Navy's BIPV upgrades in Mississippi. (Additional funding went to Naval Air Station Meridian, which also recently retrofitted a hangar there.)

One stipulation on the Navy's Recovery Act funding for these projects is that the BIPV must be used in conjunction with roofing improvements at the buildings involved.

"I essentially make sure the Navy's money gets spent the way we told Congress we were going to spend it," Taylor says. "We have to make sure we execute this project on suitable buildings."

To find the buildings best suited for the upgrade, the Navy engaged Atlantic Contingency Constructors, based in Norfolk, Va. This process began last year as the company provided the Navy with recommendations of potential sites after evaluating the buildings. The Navy reviewed the recommendations and generated a final list of the buildings it wanted to include in the project, and ACC began detailed site surveys in January where it conducts structural analyses and estimates costs.

"We're currently reviewing their designs, and Gulfport's buildings should be phased in and begin construction later this fall," Taylor says. Installations in Texas will likely see the first upgrades, expected to begin in early September. All of the projects are expected to be complete by the end of 2011 with ACC managing design firms and contractors at the sites.

Far-reaching impact

While this project will help the Navy meet its goal of 50 percent renewable on-shore energy by 2020, it's also having an impact on the private sector. ACC will hire two to five subcontractors per base during the construction phase, meaning about 25 workers will be at each site for about nine months. That could mean as many as 275 workers will see the benefits of projects at these 11 installations.

"The real job creation potential is with the construction subcontractors," Skip Dunham, PV project manager for ACC, says. "We're managing the project, but the design firms and solar installers will be the ones getting a large amount of the workload and seeing where the stimulus comes in on this project."

Taylor expects the project to make an impression on people not directly involved with the projects as well.

"I think the long-term impact will be really good," he says. "I came from the private sector, and I know so many times companies will look and say, 'this is what the military is doing.' We [Navy] try to be on the leading edge of technology and hope that others follow suit with what we're doing — opening a doorway to move renewable energy technologies forward."

By the numbers

- $69.3 million awarded to NAVFAC Southeast in Recovery Act funding
- 32 buildings receiving solar and roofing upgrades
- 11 Naval installations involved
- 3 states involved
- 5,150 kW building-integrated photovoltaics to be installed across all projects
- 9,399 MWh of energy generated across all projects in first full year after construction, based on an estimate of PV running 365 days per year, five hours per day
- $871,935 cost savings per year across all projects, based on 2009 electrical consumption

JACKSON

Finding a career in energy efficiency

After getting laid off in the fall of 2007 from her executive assistant job at a blues and gospel music group in Jackson, Miss., Kendra Lofton needed a way to pay her bills and support her teenage daughter. Kendra got a job at a local hotel working the front desk, and another as a server at a local restaurant, but those jobs only gave her work for a couple of days a week. That, combined with the huge pay cut and lack of benefits, left Kendra desperate for help.

"I felt horrible — it was the only time in my life I couldn't provide for my daughter," she says.

Kendra went to a county agency hoping they could help her find work, but what she really wanted was a career. That's when she was referred to an upcoming weatherization training program hosted by the Laborers' International Union of North America, a half-million strong labor union for construction workers, including weatherization workers.

Upon completion of the program, Kendra got a job as a weatherization technician with a contractor for a local community action agency. She went to work weatherizing homes the very next day. She says it's physically more difficult work than what she had done previously, but that "it's worth it."

"This is a career opportunity, not just a job, and that's what I like about it," Kendra says, adding that she also enjoys the work because many of the homes she weatherizes are owned by senior citizens. "[Weatherization] improves the atmosphere and the quality of life for elderly people by saving them money and making their homes energy-efficient."

Kendra also says she's seeing the effect of Recovery Act money from the U.S. Department of Energy for weatherization working first-hand.

"Local people are being recruited for jobs, and as we get paid we spend money doing what we have to do to provide for our families," she says. "People in the homes we're weatherizing are saving money and spending it in the community — everyone benefits from this."