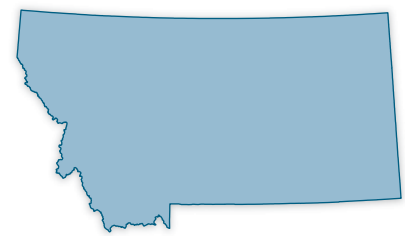




# Department of Energy Recovery Act State Memos

## Montana



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 • MONTANA RECOVERY ACT SNAPSHOT

Funding for selected DOE projects: \$71.5 million

DOE Recovery Act projects in Montana: 48

Clean energy tax credits and grants: 2

For total Recovery Act jobs numbers in Montana go to [www.recovery.gov](http://www.recovery.gov)

Montana has substantial natural resources, including coal, oil, natural gas, hydroelectric, and wind 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 Montana are supporting a broad range of clean energy projects, from energy efficiency and the smart grid to wind and geothermal. Through these investments, Montana's businesses, Montana Tech of the University of Montana, non-profits, and local governments are creating quality jobs today and positioning Montana to play an important role in the new energy economy of the future.

### EXAMPLES OF MONTANA FORMULA GRANTS

Program	State Energy Program	Weatherization Assistance Program	Energy Efficiency Conservation Block Grants	Energy Efficiency Appliance Rebate Program
Award (in millions)	\$25.9	\$26.5	\$15.2	\$0.9
	The Montana Department of Environmental Quality has received \$25.9 million to invest in state-level energy efficiency and renewable energy priorities.	The State of Montana has been received \$26.5 million to scale-up existing weatherization efforts in the state, creating jobs, reducing carbon emissions, and saving money for Montana's low-income families. Over the course of the Recovery Act, Montana expects to weatherize nearly 2,500 homes. The program also includes workforce training and education as part of the state's efforts to develop a green workforce.	Thirty-two communities in Montana has received a total of \$15.2 million to develop, promote, implement, and manage local energy efficiency programs.	The Montana Department of Environmental Quality has received over \$900,000 to offer 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 MONTANA COMPETITIVE GRANTS AND TAX CREDITS

Award	\$62.2 million	\$1.1 million	\$0.7 million	\$0.4 million
	Montana received two <b>1603 payments for renewable energy generation</b> totaling \$62.3 million, which include wind and solar projects. For example, <b>NaturEner Glacier Wind Energy 2, LLC</b> received \$62.2 million for a wind project.	<b>Montana Tech</b> of the University of Montana, in Butte, was awarded \$1.1 million for <b>Ground Source Heat Pumps</b> . The funds will be used to demonstrate low-cost heating of a modern building with a geothermal heat pump.	<b>The Montana Public Service Commission</b> , in Helena, was awarded over \$700,000 for <b>State Assistance on Electricity Policies</b> . The commission will use the funds to address Recovery Act electricity workload.	<b>WINData, Inc.</b> , in Great Falls, was awarded \$400,000 for wind energy technology research, development and testing. The funds will be used to develop a methodology for increasing wind forecasting skill.

## 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 <sup>1</sup>	Number of Selections	Selected Amount (in millions) <sup>2</sup>
Energy Efficiency	<i>Weatherization Assistance Program (F)</i>	1	\$26.5
	<i>State Energy Program (F)</i>	1	\$25.9
	<i>Energy Efficiency and Conservation Block Grant (F)</i>	32	\$15.2
	<i>Energy Efficient Appliance Rebate (F)</i>	1	\$0.9
	<i>Building Energy Efficiency (CM)</i>	7	\$0.01
	<i>Additional Programs (CM &amp; C)</i>	2	\$1.2
	<b>TOTAL Energy Efficiency</b>	<b>44</b>	<b>\$69.7</b>
Renewable Energy	<i>Wind (CM)</i>	1	\$0.4
	<b>TOTAL Renewable Energy</b>	<b>1</b>	<b>\$0.4</b>
Electric Grid	<i>State and Local Energy Assurance and Regulatory Assistance (F)</i>	2	\$1.1
	<b>TOTAL Electric Grid</b>	<b>2</b>	<b>\$1.1</b>
Carbon Capture and Storage	<i>Research and Training (CM)</i>	1	\$0.3
	<b>TOTAL Carbon Capture and Storage</b>	<b>1</b>	<b>\$0.3</b>
<b>TOTAL - DOE Programs<sup>4</sup></b>		<b>48</b>	<b>\$71.5</b>
Tax Credits/ Programs <sup>5</sup>	<i>Payments for Renewable Energy Generation in Lieu of Tax Credits (1603)</i>	2	\$62.3
	<b>TOTAL Tax Incentives</b>	<b>2</b>	<b>\$62.3</b>
<b>TOTAL - DOE/Treasury + DOE</b>		<b>50</b>	<b>\$133.8</b>
<sup>1</sup> F=Formula Grant, CM=Competitive Grant, C=Contract			
<sup>2</sup> "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.			
<sup>3</sup> Projects may cross state boundaries, signifies HQ location.			
<sup>4</sup> Total does not include administrative funds.			
<sup>5</sup> Jointly administered by DOE and the U.S. Department of Treasury.			

## **ENERGY EFFICIENCY – 44 projects totaling \$69.7 million**

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*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): \$26.5 million, Weatherization Assistance Program (WAP)**

#### **Location: Statewide**

Montana received \$26.5 million to scale-up existing weatherization efforts in the state, creating jobs, reducing carbon emissions and saving money for Montana's low-income families. Over the course of the Recovery Act, Montana expects to weatherize nearly 2,500 homes.

### **Award(s): \$25.9 million, State Energy Program (SEP)**

#### **Location: Statewide**

The Montana Department of Environmental Quality received \$25.9 million to invest in state-level energy efficiency and renewable energy priorities. State Energy Program (SEP) funds support energy efficiency improvements to 50 state-owned buildings and significantly expands the State Buildings Energy Conservation Program. The state is also using the funds for grants to speed the implementation of new clean energy technologies that are currently in production but not yet widely utilized in the state. In addition, the Montana Department of Environmental Quality (DEQ) is increasing the amount it lends in low-interest loans to consumers, businesses and non-profit organizations to install various renewable energy systems, including wind, solar, geothermal, hydro and biomass. Under the SEP, DEQ is expanding the state's recycling infrastructure to help limit the quantity of recyclable materials in landfills.

### **Award(s): 32 totaling \$15.2 million, Energy Efficiency and Conservation Block Grant Program (EECBG)**

#### **Location: Statewide**

**Recipients:** Anaconda-Deer Lodge County, Billings, Butte-Silver Bow, Butte-Silver Bow County, Cascade County, the Chippewa Cree Tribe, Bozeman, Great Falls, Kalispell, the Confederated Salish & Kootenai Tribes, Lincoln County, Missoula County, Park County, Yellowstone County, the Crow Tribe, Montana Department of Environmental Quality, Flathead County, Fort Belknap Community Council, Fort Peck Assiniboine & Sioux Tribes, Gallatin County, Havre, Lake County, Lewis & Clark County, Miles City, Missoula, the Northern Cheyenne Tribe, Ravalli

Thirty-two communities in Montana received a total of \$15.2 million to develop, promote, implement and manage local energy efficiency programs.

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

**Award(s): \$928,000, Energy Efficient Appliance Rebate Programs**

**Location: Statewide**

The Montana Department of Environmental Quality received \$928,000 to offer 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 project provides federal support for state-level rebate programs for residential ENERGY STAR appliance purchases by paying up to 50 percent of the administration costs of establishing and executing the rebate program. Though states and territories determine which appliances apply, covered appliances typically include clothes washers, dishwashers, refrigerators, freezers, room air conditioners and water heaters.

**Award(s): 7 totaling \$13,000, Buildings and Appliance Market Transformation**

**Location: Great Falls**

Silver Wolf Enterprises in Great Falls received seven awards totaling \$13,000 for Buildings and Appliance Market Transformation to purchase ENERGY STAR rated appliances. 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.

**Award(s): 2 totaling \$1.2 million, Ground Source Heat Pumps**

**Location: Butte, Kalispell**

- **Montana Tech of the University of Montana, Butte - \$1.1 million**

Montana Tech in Butte received \$1.1 million for Ground Source Heat Pumps to demonstrate low-cost heating of a modern building with geothermal heat pumps (GHP). This process uses water from nearby Orphan Boy Mine as a heat exchange medium.

- **Flathead Electric Cooperative, Kalispell - \$155,000**

The Flathead Electric Cooperative in Kalispell received \$155,000 for Ground Source Heat Pumps to convert their HVAC system to a geothermal heat pump (GHP) heating / cooling system. This project serves as a model for other utility cooperatives and increase GHP visibility.

## **RENEWABLE ENERGY – 3 projects totaling \$62.7 million**

*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 for \$62.3 million from DOE / Treasury, 1603 Payments for Renewable Energy Generation**

**Location: Etheridge, Missoula**

\*For current number of 1603 awards, see the weekly update at <http://www.treas.gov/recovery/1603.shtml>

Montana received two 1603 Payments for Renewable Energy Generation totaling \$62.3 million for wind and solar projects.



- **NaturEner Glacier Wind Energy 2, LLC, Etheridge - \$62.2 million**  
NaturEner Glacier Wind Energy 2, LLC, in Etheridge received \$62.2 million for a wind project.
- **Nasgovitz Family Limited Partnership, Missoula - \$5,000**  
Nasgovitz Family Limited Partnership in Missoula received \$5,000 for a solar project.

**Award(s): \$399,000, Wind Energy Technology R&D and Testing**

**Location: Great Falls**

WINDData, Inc., in Great Falls received \$399,000 for Wind Energy Technology R&D and Testing. The company is using real-time, off-site observations as a methodology for improving forecasting capabilities for wind-power surges one or more hours ahead of their impact on a wind plant.

**MODERNIZING THE ELECTRIC GRID – 2 projects totaling \$1.1 million**

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*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): \$289,000, Enhancing State and Local Governments’ Energy Assurance**

**Location: Helena**

The Montana Department of Environmental Quality received \$289,000 for Enhancing State and Local Governments’ Energy Assurance Program to study grid transmission options. 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): \$775,000, State Assistance on Electricity Policies**

**Location: Helena**

The Montana Public Service Commission received \$775,000 for State Assistance on Electricity Policies 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.

**CARBON CAPTURE & STORAGE – 1 project totaling \$300,000**

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*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): \$300,000, Geologic Sequestration Training and Research Grant Program**

**Location: Bozeman**

Montana State University in Bozeman received \$300,000 for the Geologic Sequestration Training and Research Grant Program to develop a low-cost reconfigurable 1 x N fiber sensor array that can be used for sub-surface large-area monitoring of carbon sequestration sites. The fiber sensor array is utilizing a single, tunable, distributed feedback (DFB), diode laser with a center wavelength of 2.004 m to access carbon dioxide absorption features. This project is supporting at least two graduate students during the research effort.

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/Montana](http://energyempowers.gov/Montana)



A wind turbine in Cascade County | Photo courtesy of Cascade County Commission

## GREAT FALLS

### Green power transmission line given new life

Thanks to funds from the American Recovery and Reinvestment Act, construction of a green power transmission line stretching from Lethbridge, Alberta in Canada, down to Great Falls, Mont., was put back on track after a bank failure.

Currently under construction, the Montana-Alberta Tie Line, which is owned by Toronto-based Tonbridge Power, will connect the electricity markets of Alberta and Montana and bring about 600 megawatts of wind-generated power to communities throughout the Western U.S. and Canada.

Echoing U.S. Energy Secretary Steven Chu's comment last fall,

Peggy Beltrone, a Cascade County, Mont., commissioner, says the 214-mile green power line will create jobs and begin the build-out of transmission networks needed to invigorate and expand the wind energy business in Montana.

"This new transmission line, and the accompanying wind farms, will create high wage jobs, needed property taxes and substantial revenues to landowners," Beltrone says. "The clean energy investment carries an economic impact of over \$1 billion."

The transmission line should generate about 150 construction jobs and 50 to 75 green jobs directly related to the wind energy companies, which have secured space for their wind farms along the line.

Montana is ranked third in terms of wind energy potential in the U.S., according to a National Renewable Energy Laboratory report published in February.

The new wind farms will also be a good source of revenue for Cascade County.

The new 230-kilovolt line will carry about 300 MW of Montana wind-generated power north to markets in Canada and another 300 MW to U.S. markets. That's enough to power about 35,000 homes.

The Western Area Power Administration loaned Tonbridge stimulus funds totaling \$161 million after a bank failure. The company stepped in because the new bank owners did not honor the original bank credit commitment.

Private investments total over \$70 million for the \$215 million project. Construction should be completed by the middle or end of this year.

"What the Recovery Act did was take a really, really, really big boat and help turn it around," Sen. Jon Tester, D-Mont., told the Billings Gazette last month.

### WxTV broadcasts weatherization training

As the director of the Montana Weatherization Training Center, Mike Vogel knows that the field of weatherization is changing. That's why after 20 years of training workers, the center now offers a program that is not limited to its location in Bozeman, or even to the state of Montana itself.

After receiving a \$354,000 partnership grant from the National Community Action Foundation and ExxonMobil in early June, the training center is producing WxTV (Weatherization Television Network), a weekly weatherization show available on the Internet. The training center is affiliated with Montana State University Extension.

With episodes featuring experts from different areas of the country, the show teaches about various weatherization projects and provides a refresher for those who are already in the profession. Viewers also have the opportunity to blog comments and questions regarding the content.

"Broadcasting is extremely expensive. This way we can produce a high quality product and people can view [the episodes] when they

want,” says Vogel.

According to Vogel, WxTV is part of an overall effort to enhance national weatherization training and reach a new generation of weatherization workers. Since the American Recovery and Reinvestment Act (ARRA) began offering funding through state Weatherization Assistance Programs (WAP) last year, Vogel says the

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*“We’re trying to enhance the green workforce with younger folks. It’s just another spoke in the wheel as far as an outreach for training,”*

– Mike Vogel,  
director of  
the Montana  
Weatherization  
Training Center

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profession has seen an influx of new workers.

“I would say it’s a real mixed bag between a whole new generation of workers coming in that are not contractors, not weatherization people – they’re young folks that want a job,” Vogel says. “We’re also dealing with a very high level of folks out of the workplace, like architects and engineers, who are very good contractors but are out of work.”

With the variety of people in need of introductory and professional weatherization training, Vogel says it can be a challenge to meet different learning styles. While the center continues to offer traditional classes and fieldwork, WxTV is one effort to accommodate the growing demand for training and satisfy a younger, more tech-savvy audience.

“We’re trying to enhance the green workforce with younger folks,” says Vogel. “It’s just another spoke in the wheel as far as an outreach for training. And we’re finding that more and more folks are very interested in enhancing their own training programs, especially with funding and a lot of new centers coming on board.”

Vogel says the center is tracking viewership to continue making improvements and strives to reach the 900 local service providers across the country. They currently have a constant viewership of about 2,000, Vogel says.

“We are hitting every state and it’s a pretty nice balance based on the number of agencies that are there,” Vogel says. “We’re trying to work with as many programs that we can so that footage comes from all over the country.”

While the show is currently focused on contractors and crew training, Vogel says they are looking for funding to create episodes geared toward homeowners. There have been 12 episodes created so far, and the goal is to produce 36 with the grant funding.

## BUTTE

### Energy Corps takes root in Montana, seeks to make America greener

For the last 17 years, AmeriCorps members have pledged to uphold their duties as public servants, vowing to “get things done for America—to make our people safer, smarter and healthier.” But a new type of volunteering in Montana is adding one more thing to that list: making America greener.

To help address unmet community energy needs, the National Center for Appropriate Technology (NCAT) established the Energy Corps program under AmeriCorps in the Big Sky state. The project, which was funded by the Montana Governor’s Office of Community Service and the Corporation for National and Community Service, the federal agency that oversees AmeriCorps, has 12 people scattered throughout the state, serving at reservations, community action agencies, nonprofit organizations and colleges.

Since October, Energy Corps members, whose backgrounds run the gamut, have been busy assisting with weatherization services for low-income areas, developing clean energy awareness campaigns for communities and performing community building energy audits on reservations.

AmeriCorps members have been helping clean up communities and teaching residents to be more environmentally conscious since former President Bill Clinton created the program in 1993, but distributing volunteers to areas to focus solely on energy efficiency and renewable energy is relatively new.

“Our mission is to transfer sustainable technologies and provide energy assistance to underserved populations,” says Holly Hill, NCAT’s Energy Corps program director, which chose communities in the most need of energy-efficiency assistance.

“We also saw it as an opportunity to provide green job training for the emerging green collar workforce,” she adds.

For one Energy Corps member, the program was an opportunity he couldn’t pass up. Taylor Lyon, 22, graduated from Carroll College in Helena, Mont., in 2009 with a biology degree, and was looking to break into the biofuels field.

He felt lucky to land a service position at the Bio Energy Center at Montana State University—Northern in Havre, Mont.

“It just brought to light the joy in volunteering. You make connections; you learn first-hand of how the jobs work,” Taylor says. “It is an easy transition into the real world after school.”

Acting as a research assistant, Taylor spends his days in the lab helping scientist Jon Soriano discover ways to make better biodiesel with oilseed crop—fuel that can run in the cold winter months. The ultimate goal of the research is to spur economic development in north central Montana with agricultural growth and find ways to make their fuels locally sustainable.

The center “takes the research from the oilseed to the exhaust,” Taylor says, which means there is leftover biodiesel for the taking after it’s studied in the lab. In line with the AmeriCorps mission, the school donates the fuel to North Central Montana Transit, the free bus service for low income communities in the Hi-Line area. Four of the seven buses run entirely on biodiesel. The rest have a 20 percent blend of biodiesel, cutting the fuel costs by the same amount.

Some volunteers are stationed at Chippewa Cree Tribe in Box Elder, Mont., helping the reservation develop an energy plan and with community outreach and education. Others are working with the community action program agency, the District IV Human Resource Development Council in Havre, to weatherize homes.

Energy Corps volunteers receive a living stipend of \$1,100 a month and an educational award of \$4,725 upon successful completion of service. The total number of members in the Energy Corp program could be as many as 57 by this fall, when the organization hopes to expand the program into Iowa, Arkansas and Pennsylvania, other states where NCAT operates.

Melissa Terry, the Arkansas Energy Corps coordinator for NCAT, has been in contact with several Arkansas partners that are interested in benefitting from the service of an Energy Corps member. NCAT has received similar interest from other groups in Iowa and Pennsylvania.

“We see a need for sustainable energy services across the country,” says Holly. “The Energy Corps program has been a great success in Montana and we hope we can replicate that success on a larger scale.”