

Department of EnergyRecovery Act State Memos

Maine





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.

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American Recovery and Reinvestment Act



U.S. DEPARTMENT OF ENERGY • MAINE RECOVERY ACT SNAPSHOT

Funding for selected DOE projects: \$200.2 million

DOE Recovery Act projects in Maine: 35

Clean energy tax credits and grants: 7

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

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

EXAMPLES OF MAINE FORMULA GRANTS

Program

State Energy Program

Weatherization Assistance Program

Energy Efficiency Conservation **Block Grants**

Energy Efficiency Appliance Rebate Program

(in millions)

The Public Utilities Commission has received \$27.3 million to invest in state-level energy efficiency and renewable energy priorities.

\$41.9

The Maine State Housing Authority has received \$41.9 million to scale-up existing weatherization efforts in the state, creating jobs, reducing carbon emissions, and saving money for Maine's low-income families. Over the course of the Recovery Act, Maine expects to weatherize more than 4,400 homes. The program also includes workforce training and education as part of the state's efforts to develop a green workforce.

\$15

Twenty-five communities in Maine received a total of \$15 million to develop, promote, implement, and manage local energy efficiency programs.

\$1.3

The Public Utilities Commission has received \$1.3 million 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 MAINE COMPETITIVE GRANTS AND TAX CREDITS

Award \$95.9 million

Central Maine Power Company was awarded \$95.9 million through the **Smart Grid Investment Grant Program** to install a smart meter network for all its residential, commercial and industrial customers approximately 650,000 meters.

\$40.4 million

Maine received six 1603 payments for renewable energy generation totaling \$40.6 million, which include solar projects and wind facilities. For example Evergreen Wind Power received \$40.4 million for a wind facility.

\$9.4 million

Verso Paper Corporation was awarded \$9.4 million to deploy industrial energy efficiency technologies that will recover waste energy from industrial facilities. The project involves 12 subprojects at Verso paper mills located in Jay and Bucksport, Maine and Sartell, Minnesota.

\$7.1 million

The University of Maine received **\$7.1 million** to design and deploy three floating offshore turbine prototypes in Orono to research wind power.

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	\$41.9
	State Energy Program (F)	1	\$27.3
	Energy Efficiency and Conservation Block Grant (F)	25	\$15.0
	Energy Efficient Appliance Rebate (F)	1	\$1.3
	Industrial Efficiency (CM)	1	\$9.4
	TOTAL Energy Efficiency	29	\$94.9
	Solar (CM)	1	\$1.0
Renewable Energy	Wind (CM)	1	\$7.1
	TOTAL Renewable Energy	2	\$8.1
	Smart Grid Investment and Demonstrations Project (CM) ³	1	\$95.9
Electric Grid	State and Local Energy Assurance and Regulatory Assistance (F)	2	\$1.1
	TOTAL Electric Grid	3	\$97.0
Science and Innovation	Small Business Research (SBIR/STTR) (CM)	1	\$0.2
	TOTAL Science and Innovation	1	\$0.2
TOTAL - DOE Programs ⁴		35	\$200.2
	Payments for Renewable Energy Generation in Lieu of Tax Credits (1603)	6	\$40.6
Tax Credits/Payments ⁵	Clean Energy Manufacturing Tax Credits (48C)	1	\$0.9
	TOTAL Tax Incentives	7	\$41.5
TOTAL - DOE/Treasury + [42	\$241.7	
¹ F=Formula Grant, CM=Compe	titive Grant, C=Contract		
² "Selected" indicates DOE has necessarily indicate that a final	selected a potential funding recipient, which begins the process of nego agreement has been reached.	tiating an agreeme	nt. This does not
³Projects may cross state boun	daries, signifies HQ location.		
⁴ Total does not include adminis	trative funds.		
Jointly administered by DOE a	nd the U.S. Department of Treasury.		

ENERGY EFFICIENCY – 29 projects totaling \$94.9 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): \$41.9 million, Weatherization Assistance Program (WAP) Location: Statewide

The Maine State Housing Authority received \$41.9 million to scale-up existing weatherization efforts in the state, creating jobs, reducing carbon emissions and saving money for Maine's low-income families. Over the course of the Recovery Act, Maine expects to weatherize more than 4,400 homes. The program also includes workforce training and education as part of the state's effort to develop a green workforce. The Housing Authority operates the Weatherization and Central Heating Improvement Programs (CHIP) to finance energy-related repairs for low-income homeowners and renters. The programs are run through Maine's Community Action Program (CAP) agencies. The Weatherization program is being used for improvements that increase the energy efficiency of the home, including insulation, weather-stripping and safety-related repairs.

Award(s): \$27.3 million, State Energy Program (SEP) Location: Statewide

The Public Utilities Commission received \$27.3 million to invest in state-level energy efficiency and renewable energy priorities. Maine is using its Recovery Act SEP funding to promote and expand energy efficiency in the commercial, industrial and residential sectors throughout the state, both saving energy and creating green jobs. In order to reduce energy use at large industrial facilities in the state, Maine is offering financial assistance to support targeted technical and engineering studies at the facilities. Additionally, funding is being used to expand a state program offering energy audits to businesses, allowing additional businesses to identify opportunities for energy savings. Maine is also improving energy efficiency in the state by jump-starting the implementation of more energy-efficient building codes. The state is increasing funding for a program that helps builders and business owners invest in up-front efficiencies when designing and constructing new commercial buildings.

Award(s): 25 totaling \$15 million, Energy Efficiency and Conservation Block Grant Programs (EECBG)

Location: Statewide

Recipients: Androscoggin County, Aroostook Band of Micmac Indians of Maine – Tribe, Aroostook County, Auburn, Augusta, Bangor, Biddeford, Town of Brunswick, Cumberland County, Hancock County, Houlton Band of Maliseet Indians of Maine – Tribe, Kennebec County, Knox County, Lewiston, Maine State Energy Office, Oxford County, Passamaquoddy Tribe of Maine – Tribe, Penobscot Tribe of Maine – Tribe, Penobscot County, Portland, Town of Sanford, Town of Scarborough, Somerset County, South Portland, York County

Twenty-five communities in Maine received a total of \$15 million to develop, promote, implement and manage local energy efficiency programs.

Maine is using its Recovery Act EECBG funds to promote the development of a clean and sustainable energy infrastructure, laying the groundwork for a more prosperous economy while saving and creating more than 100 green jobs. Approximately 60 percent of the state's funds are being

competitively awarded to local cities and counties for energy saving projects, such as financial incentive programs, energy efficiency retrofits, transportation programs, energy distribution measures and the installation of renewable energy technologies on government buildings.

Award(s): \$1.3 million, Energy Efficient Appliance Rebate Programs Location: Statewide

The Public Utilities Commission received \$1.3 million to offer consumer rebates for purchasing certain ENERGY STAR® appliances. These energy efficient appliances reduce energy use, save money for families, help the environment and support the local economy. The Appliance Replacement Program in Maine helps low-income people reduce their energy costs by replacing outdated appliances that are inefficient and expensive to operate. The Appliance Replacement Program is made possible with funding from Efficiency Maine, a program of the Maine Public Utilities Commission.

Award(s): \$9.4 million, Combined Heat and Power (CHP), District Energy Systems, Waste Heat Recovery Implementation and Deployment of Efficient Industrial Equipment Location: Jay

Verso Paper Corporation in Jay received a \$9.4 million Recovery Act grant for the deployment of waste energy recovery technologies. The project will implement a portfolio of twelve waste energy recovery sub-projects at Verso paper mills. The sub-projects were chosen for their energy savings potential and potential for immediate implementation. The bundled project has an overall efficiency of 33 percent and will save an estimated 1.28 trillion Btu annually.

RENEWABLE ENERGY – 9 projects totaling \$49.6 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): 6 payments totaling \$40.6 million from DOE / Treasury, 1603 Payments for Renewable Energy Generation

Location: Statewide

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

Maine received six 1603 payments for renewable energy generation totaling \$40.6 million, including solar projects and wind facilities.

• Evergreen Wind Power V, LLC, Danforth – \$40.4 million

The Stetson Wind Project V, LLC, in Danforth received \$40.4 million for a wind farm.

• Solar Center, LLC, Arundel - \$60,000

Solar Center, LLC, in Arundel received \$60,000 for a photovoltaic array.

• The Jojoba Company, Waldoboro - \$26,000

The Jojoba Company in Waldoboro received \$26,000 for a photovoltaic array.

• Camden Riverhouse Hotel, Camden (2) - \$32,000

Camden Riverhouse Hotel in Camden received two awards totaling \$32,000 a solar electric array and a solar thermal system.

• Mark Morris Electric, Inc., South Portland - \$6,000

Mark Morris Electric, Inc., in South Portland received \$6,000 for a photovoltaic system.

Award(s): \$903,000 from DOE / Treasury, Clean Energy Manufacturing Tax Credit (48C) Location: Millinocket

RE-Gen, LLC, in Millinocket received \$903,000 to build a factory to produce Biomass Gasification Furnaces with a capacity of 250 systems per year. The result will aid the domestic biofuels industry while promoting energy efficiency.

Award(s): \$955,000, High-Penetration Solar Deployment Location: Fairfield

Kennebec Valley Community College (KVCC) in Fairfield received \$955,000 for High-Penetration Solar Deployment to modify their existing high-quality Photovoltaic (PV) and Solar Heating & Cooling (SHC) technician training programs. The program is also integrating the nation's best practices to develop and deliver a nationally accepted train-the-trainer program designed around industry standards. Professional development activities are targeting instructors from community colleges, career and technical education centers and private industry training incubators in northern New England who are looking to enhance their existing plumbing, heating, electrical and other building-related programs through the inclusion of (PV) and / or (SHC) installation training courses.

Award(s): \$7.1 million, Wind Energy Consortia between Institutions of Higher Learning and Industry Location: Orono

The University of Maine in Orono received \$7.1 million for the Wind Energy Consortia Between Institutions of Higher Learning and Industry program to design and deploy two 10 kW and one 100 kW floating offshore turbine prototypes. Two turbines will be located at the University of Maine's Deepwater Offshore Wind Test Site that will be located in a pre-selected site in state waters and one turbine will be operated at an offshore test site in the Isle of Shoals by the University of New Hampshire. The University consortium's research and development plan includes optimization of designs for floating platforms by evaluating the options for using more durable, lighter, hybrid composite materials, manufacturability and deployment logistics.

MODERNIZING THE ELECTRIC GRID - 3 projects totaling \$97 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): \$321,000, Enhancing State and Local Governments' Energy Assurance Location: Augusta

The Maine Public Utilities Commission in Augusta received \$321,000 for Enhancing State and Local Governments' Energy Assurance to expand state and local energy assurance planning and resiliency efforts and to build in-house state and local government energy assurance expertise.

Award(s): \$95.9 million, Smart Grid Investment Grant Program (EISA 1306) Location: Statewide

The Central Maine Power Company received \$95.9 million for the Smart Grid Investment Program to install a smart meter network for all residential, commercial and industrial customers in the utility's service territory (approximately 650,000 meters).

Award(s): \$784,000, State Assistance on Electricity Policies Location: Augusta

The Maine Public Utilities Commission in Augusta received \$784,000 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.

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: Portland

Ocean Renewable Power Company, LLC in Portland, received \$150,000 through a Small Business Technology Transfer (STTR) grant to test tidal power generator devices in the University of Maine's water tow testing tank. Testing of scale models will allow the company to optimize its design of full-scale units which will generate electricity from tidal currents.

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/Maine

WESTBROOK

Maine company growing with weatherization work

BIOSAFE Environmental Services Inc. touts itself as leader in lead and asbestos removal and has worked for more than a decade making homes hazard-free. So it came as a surprise to Mark Coleman, president and founder of BIOSAFE, when in 2003 he received an interesting proposal from Maine's regional community action programs.

"They realized we had talent in . . . lead abatement and home repair and approached us about expanding into weatherization," he says.

Mark welcomed the chance to collaborate with the community action groups to grow the business and offer employment to out-ofwork individuals.

According to the company, BIOSAFE has completed about \$2 million worth of weatherization projects with the help of Recovery

Act funds from the U.S Department of Energy. The funding helps families lower energy costs through simple home improvements like installing insulation in walls and ceilings to prevent heat from escaping — a necessity during the cold Maine winter.

The small business started off with two trucks and six technicians devoted to weatherization. Now, with the increasing demand for weatherization upgrades, BIOSAFE's staff has grown to 30 technicians who have weatherized more than 500 homes, according to the company.

"We saw an opportunity to create job growth through federal funding and to assist low-income families." - Mark Coeman president and founder of BIOSAFE

Mark credits BIOSAFE's impressive growth to the staff's commitment to exceptional customer service and quality weatherization work. Thank-you notes he has received from clients praise his technicians' hard work and express gratitude for the substantial increase in energy savings they've noticed.

"These letters, many handwritten, speak to the quality and expertise we have," Mark says.

The company has become an important partner in delivering energy-efficient upgrades to communities in Maine. And the most satisfying part of it, Mark says, has been the opportunity to give back.

As he puts it, "When you give, you receive."

Earlier this month, Maine voters approved borrowing \$26 million for a variety of energy issues, including \$11 million for research on deepwater floating turbines.

Energy Secretary Chu hails University of Maine's wind research

Secretary Chu visited the university's Orono campus to learn more about its 10-year plan to design and deploy deepwater wind technology, an effort that could pave the way for the first floating commercial wind farm in the United States.

"It's part of the leadership Maine has shown in going toward a sustainable economy," Chu told the university's newspaper.

Invited by Maine Sen. Susan Collins, Chu was given a tour of the university's Advanced Structures and Composites Center by director Habib Dagher, who briefed the secretary on offshore technologies being tested there. Collins and Maine Gov. John Baldacci also attended the 45-minute tour of the laboratory.

The University of Maine-led DeepCwind Consortium National Research Programreceived \$7.1 million from the American Recovery and Reinvestment Act in October to develop offshore wind turbine performance and reliability improvements.

As part of that research, DeepCWind is collecting data and testing out three different platform types capable of supporting a 120 kW wind turbine. The prototype will be tested at the University of Maine Deepwater Offshore Wind Test Site, which is about three miles south of Monhegan Island.

To date, there have only been two floating wind farms in the world, a decommissioned, demonstration farm off the coast of Italy and a 2.4 MW floating turbine off of Norway, which supplies energy to the ountry's grid. There are currently no commercial offshore wind farms in the United States.

Dagher and his colleagues have estimated that offshore wind energy projects could create up to 15,000 jobs a year between 2020 and 2030 if floating wind farms are up and running in the Gulf of Maine.