

**Award Selections for Industrial Technologies Program Recovery Act Funding**

**Deployment of Combined Heat and Power (CHP) Systems, District Energy Systems, Waste Energy Recovery Systems, and Efficient Industrial Equipment**

Award Winners	City and State	Project Description	Total DOE Funding
Air Products and Chemicals, Inc.	Middletown, OH	<b>Waste Energy Project at the AK Steel Corporation Middletown Works.</b> The project will construct a combined cycle power generation plant at the Middletown, OH, works of AK Steel that will capture and process the blast furnace gas (BFG). The BFG, generated in ironmaking operations, is either flared or used to make steam needed for industrial processes. Currently, over 50% of the BFG is flared. This project will utilize the waste gas which would otherwise be flared, generating over 100 MW of power and saving an estimated 2.7 trillion Btu annually.	\$30,000,000
ArcelorMittal USA	East Chicago, IN	<b>ArcelorMittal USA Blast Furnace Gas Flare Capture.</b> The project will install an efficient recovery boiler to use the waste blast furnace gas generated during ironmaking operations to produce electricity and steam on-site at its East Chicago, IN steel mill. The plant currently wastes 46 billion cubic feet annually of BFG that must be flared. The project will save an estimated 3.66 trillion Btu annually from the waste gas.	\$31,603,993
Clean Tech Partners	Wisconsin	<b>Creating Jobs Through Energy Efficiency Using Wisconsin's Successful Focus on Energy Program.</b> The project will implement a portfolio of 25 sub-projects to install energy efficient equipment in facilities at 9 different sites across the state. The companies include a diverse cross-section of Wisconsin's industrial sector, including pulp and paper mills, printing, corn milling, plumbing and small engine manufacturing. The project will save an estimated 1.21 trillion Btu annually, increasing overall energy efficiency by 45%.	\$14,588,384
The Dow Chemical Company	St. Charles, LA	<b>Replacing Acetylene Recovery with Acetylene Hydrogenation.</b> This project will replace an existing acetylene recovery system with an acetylene hydrogenation reactor system at Dow Chemical's St. Charles, LA ethylene plant. The existing system recovers the purified, highly energy-intensive acetylene. However, there is a lack of market demand for purified acetylene and the un-sold product must be flared. The project will save an estimated 0.85 trillion Btu annually.	\$7,068,095
Rhode Island LFG Genco, LLC	Johnston, Rhode Island	<b>Johnston Rhode Island Combined Cycle Electricity Generation Plant Fueled by Landfill Gas</b> The project will construct and operate a combined cycle power plant facility at the Johnston, Rhode Island central landfill. The project will be the second-largest landfill gas-to-electricity generation facility in the United States. The project will generate 42 MW of power, and save an estimated 1.21 trillion Btu annually from the landfill gas that would otherwise be flared.	\$15,000,000

Ridgewood Renewable Power, LLC	Brea, California	<b>Olinda Combined Cycle Electric Generating Plant Fueled by Waste Landfill Gas.</b> The project will modify and expand an existing landfill gas collection system and construct a combined cycle power generation facility at the Olinda Alpha Landfill in Brea, California. The project will generate 32 MW of power, and save an estimated 0.90 trillion Btu annually from the landfill gas that would otherwise be flared.	\$10,000,000
Seattle Steam Company	Seattle, WA	<b>CHP at Post Street in Downtown Seattle.</b> The project will deploy a combined heat and power (CHP) plant in downtown Seattle that is integrated into the existing electrical and thermal energy distribution networks. It will increase the capacity and reliability of the electrical grid and district heating system in the downtown core, particularly in light of growing energy demand. The new CHP plant will generate 50 MW of electrical power and steam to offset existing, inefficient steam production equipment. The CHP plant will save an estimated 1.84 trillion Btu annually over the current, inefficient infrastructure.	\$18,750,000
Texas Medical Center Central Heating and Cooling Services Company	Houston, TX	<b>Thermal Energy Corporation Combined Heat and Power Project.</b> The project will build a Combined Heat and Power (CHP) facility at its existing district heating plant, serving the largest medical center in the world. The CHP system will increase electric and thermal efficiency, provide steam to the campus, and improve the overall reliability of the existing plant, enabling continued operations even in the event of a grid outage. The new CHP plant will generate 45 MW of power and provide steam to the district heating plant. The project will save an estimated 0.75 trillion Btu annually over separate electrical and steam generation.	\$10,000,000
Verso Paper Corporation	Jay, ME Bucksport, ME Sartell, MN	<b>Immediate Deployment of Waste Energy Recovery Technologies at Multiple Sites.</b> The project will implement a portfolio of 12 waste energy recovery sub-projects at Verso paper mills located in Jay, Maine; Bucksport, Maine; and Sartell, Minnesota. The sub-projects were chosen for their energy savings potential and potential for immediate implementation. The bundled project has an overall efficiency of 33%, and will save an estimated 1.28 trillion Btu annually.	\$9,356,177

### Industrial Assessment Centers and Plant Best Practices

**Industrial Assessment Centers (IACs)** – Provide eligible small and medium-sized manufacturers with no-cost energy assessments and serve as a training ground for the next generation of energy-savvy engineers.

Award Winners	City and State	Project Description	Total DOE Funding
Bradley University	Peoria, IL	Industrial Assessment Center	\$136,000
Georgia Institute of Technology	Atlanta, GA	Industrial Assessment Center	\$105,000
Lehigh University	Bethlehem, PA	Industrial Assessment Center	\$143,000
Mississippi State University	Mississippi State, MS	Industrial Assessment Center	\$150,000
North Carolina State University	Raleigh, NC	Industrial Assessment Center	\$140,000
Oklahoma State University	North Stillwater, OK	Industrial Assessment Center	\$105,000
San Diego State	San Diego, CA	Industrial Assessment Center	\$100,000
Tennessee Technological University	Cookeville, TN	Industrial Assessment Center	\$125,000
Texas A&M University	College Station, TX	Industrial Assessment Center	\$132,000

University of Alabama	Tuscaloosa, AL	Industrial Assessment Center	\$120,000
University of Dayton	Dayton, OH	Industrial Assessment Center	\$140,000
University of Delaware	Newark, DE	Industrial Assessment Center	\$125,000
University of Louisiana at Lafayette	Lafayette, LA	Industrial Assessment Center	\$100,000
University of Michigan	Ann Arbor, MI	Industrial Assessment Center	\$115,000
West Virginia University	Morgantown, WV	Industrial Assessment Center	\$136,000

### State Agencies

Award Winners	City and State	Project Description	Total DOE Funding
Alabama Department of Economic and Community Affairs	Montgomery, AL	Reduce industrial energy intensity and increase education about energy management within the State of Alabama by performing on-site energy assessments at small, medium, and large energy-using manufacturing sites and by providing concurrent lean manufacturing assessments .	\$350,000
Idaho Office of Energy Resources	Boise, ID	Demonstrate the value of permanent on-site energy engineering and energy management projects. Idaho will also determine the benefits and costs of a unique utility-industry Combined Heat and Power (CHP) partnership project by completing an investment-grade feasibility study that integrates CHP with additional energy efficiency assessments.	\$350,000
Kentucky Department for Energy Development and Independence	Frankfort, KY	Implement the Kentucky Program for Industrial Energy Efficiency to assist the state's industrial facilities to achieve and sustain an annual reduction in energy intensity of 2.5% per year for at least 3 years. This project will use and expand existing industrial energy management resources in the Commonwealth, and will also promote and leverage a range of DOE resources, including best practices tools and assessments, software, and training materials.	\$349,976
Louisiana State Energy Office	Baton Rouge, LA	Work with industry to save energy and money, increase productivity, promote carbon management and reduce environmental impacts by providing plants with access to proven technologies, energy assessments, and software tools.	\$344,293
Maryland Energy Administration	Annapolis, MD	Improve energy efficiency of Maryland industrial facilities through waste heat recovery and combined heat and power, as well as traditional energy efficiency improvements. The state will leverage aspects of the Federal Save Energy Now program, such as DOE training materials and software tools, and combine them with additional state resources through the Maryland Technology Extension Service.	\$350,000
Minnesota Department of Commerce	St. Paul, MN	Develop a full package of industrial energy efficiency resources to assist Minnesota business and industry in implementing energy efficient technologies and practices aimed at reducing overall energy use. To achieve this goal, Minnesota Department of Commerce will coordinate and conduct trainings, energy assessments, technology demonstrations/pilots, and technical assistance throughout the state.	\$349,985
Mississippi Development Authority-Energy Division	Jackson, MS	Create partnerships through its Industrial Advisory Board and reduce energy use in the industrial and manufacturing sectors. Through the core activities of the Southeastern Center for Industrial Energy Intensity Reduction – including the Learning Center, Site Assessments, and Project Implementation – the state will directly reduce the industrial energy intensity in the region.	\$350,000

New Jersey Industrial Energy Program	Trenton, NJ	Provide energy assessments, technical assistance, and technology deployment to reduce the energy intensity of New Jersey manufacturers. The New Jersey Industrial Energy Program will also develop several marketing and outreach activities to distribute the content of its services to a wider population of manufacturers.	\$350,000
Ohio Energy Office, Ohio Department of Development	Columbus, OH	Integrate state and federal programs under the Ohio Center for Industrial Energy Efficiency and continue to work with partners to provide energy efficiency assistance to manufacturers across the state. Ohio will also develop the infrastructure needed to deliver Save Energy Now products and services in a cost effective manner to Ohio companies. Ohio will market Save Energy Now assessments, energy efficiency products and services, and state-based support through presentations at trade association meetings, direct contact with manufacturers, and by partnering with participating utilities.	\$349,977
Pennsylvania Department of Environmental Protection	Harrisburg, PA	Implement a comprehensive, proactive industrial energy efficiency program throughout the state which provides technical assistance to manufacturers and funds targeted activities to improve industrial energy efficiency across multiple sectors.	\$350,000
Wisconsin's Office of Energy Independence	Madison, WI	Expand the WisconSEN Program and continue to engage committed partners to complete Energy Savings Assessments and provide follow-up project implementation assistance. The expanded program will also conduct Save Energy Now training events and outreach, provide American National Standards Institute pilots at Wisconsin industrial facilities, increase industrial project energy savings by implementing recommendations from the assessments, and promote new, emerging technologies through demonstrations and case studies.	\$350,000
<b>Regional Partnerships</b>			
<b>Award Winners</b>	<b>City and State</b>	<b>Project Description</b>	<b>Total DOE Funding</b>
Energy Resources Division of the Georgia Environmental Facilities Authority	Savannah, GA	Provide a wide array of energy efficiency activities to benefit local industry in Georgia, Tennessee and North Carolina, including: energy assessments, an American National Standards Institute accredited plant certification pilot program, and local training centers, which will help transform the market for industrial energy efficiency in the Southeast.	\$500,000
Illinois State Energy Office	Springfield, IL	Create dynamic energy efficiency partnerships between the Department of Energy, participating states, utilities, the Midwest Energy Efficiency Alliance, Energy Service Companies (ESCOs), industrial trade groups, and others to increase the number of Midwest industrial companies implementing energy assessment activities at their facilities and committing to the resulting energy-related capital investments. The initiatives will put to use program and technical resources from DOE's Save Energy Now program, along with ongoing state and regional resources.	\$500,000

Massachusetts Department of Energy Resources and the Center for Energy Efficiency and Renewable Energy at the University of Massachusetts (CEERE)	Boston, MA	Provide industrial assessments in order to improve energy efficiency and reduce carbon emissions in the New England area. In order to improve the implementation rate of the assessments, CEERE will organize meetings for each assessment, bringing together the client, representatives from the state, electric and gas utilities and, if possible, vendors selected by the client.	\$500,000
Washington Department of Community Trade and Economic Development	Olympia, WA	Implement energy efficiency improvements in medium to large industrial facilities in Washington, Oregon, Idaho and Montana. The project will build upon and extend existing Save Energy Now and other state-sponsored industrial projects and seek to leverage community block grant funds. The Northwest Industrial Partnership team will identify no/low-cost and capital-funded measures by conducting plant energy efficiency assessments and Best Practices trainings; providing technical support to industries and regional program providers; tracking and reporting energy savings; coordinating state industrial energy programs in Oregon, Idaho and Montana; and establishing the Northwest Industrial Energy Efficiency Coalition Leadership Team.	\$500,000
West Virginia Department of Energy	Charleston, West Virginia	Develop and implement a regional system and partnership for delivering enhanced industrial energy efficiency assessments and communication services. The project will deploy multiple pathways to reduce energy intensity and assist industrial manufacturing to operate more efficiently. Activities will 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.	\$500,000
<b>National Technical Assistance Provider</b>			
<b>Award Winners</b>	<b>City and State</b>	<b>Project Description</b>	<b>Total DOE Funding</b>
Oak Ridge Partnership for Industrial Energy Efficiency	Oak Ridge, TN	Perform 100 enhanced Save Energy Now assessments in large industrial plants, and provide technical assistance to key large industrial plants to assist the plants in implementing identified assessment energy savings results. The Oak Ridge Partnership is one of two teams chosen by the DOE Industrial Technologies Program to provide Save Energy Now Assessment Integrator support to key Industrial Technologies Program partners, with a priority to companies that have signed the <i>Save Energy Now</i> LEADER pledge. The Oak Ridge Partnership team is lead by ORNL, and includes BCS Inc., Georgia Tech, FCS Consulting, and Rutgers University as team partners.	\$1,408,356