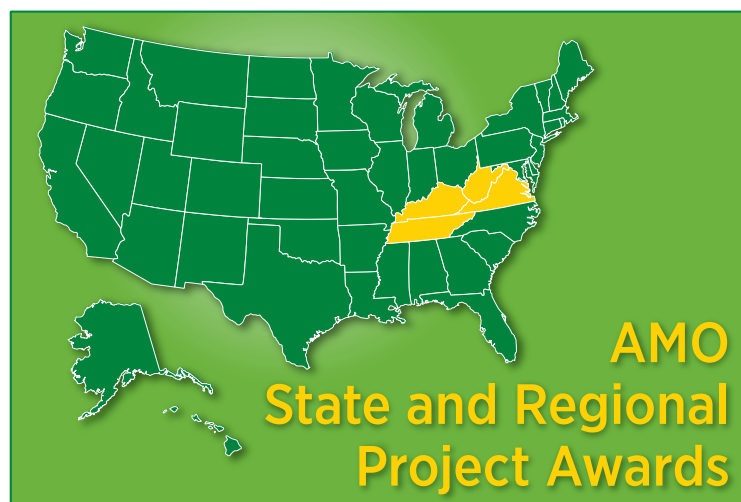


Development of a Regional Assessment /Implementation *Save Energy Now* Delivery System

West Virginia Division of Energy and Industries of the Future – West Virginia, along with their partners, are taking a regional approach to reduce industrial energy intensity by developing and implementing a comprehensive energy-reduction package that incorporates an enhanced energy assessment process that includes investment grade cost analysis, as well as creation of the Regional Energy Efficiency Knowledge Center and an Energy Management resource database. The goal is to ensure that more plants in West Virginia, eastern Ohio, western Pennsylvania, eastern and central Kentucky, eastern and central Tennessee, and southwestern Virginia have access to this resource and other energy efficiency tools and begin to implement energy efficient technologies and practices into their operations.

The overarching objective of West Virginia's program is to achieve the Energy Policy Act of 2005's (EPAct) goal by reducing industrial energy intensity by 25% over a 10-year period. The program plans to reach this goal by implementing a multi-pronged approach in West Virginia, eastern Ohio, and western Pennsylvania to improve the current energy assessment program. Among the things the team is working towards is implementing an energy management system at a representative company to attain certification to the American National Standards Institute (ANSI) standard for energy management. The team is also developing a Regional Industrial Energy Efficiency Marketing and Outreach Center to promote participation in the regional partnership, showcase success stories, provide information to the media, and serve as the central point of contact for inquiries about industrial energy efficiency tools, services, and resources.

The West Virginia team has developed a new way of conducting assessments through an Enhanced Energy Assessment Process (EEAP); the EEAP has three stages. During the pre-assessment stage, the team establishes a baseline through interactive sessions with plant staff and a thorough analysis of the facility's utility bills. One of the main differences from traditional assessments occurs during the assessment itself, which is the second stage. At this stage, the team takes an extended amount of time to review operations and log a significant amount of data. Frequently, the team conducts multiple site visits to execute this portion of the project. Finally, during the post-assessment stage, the team finalizes the reports, which include a vendor analysis. The team also provides the plant with information on available tax



Project Description

Funding Amount: \$733,015

Funding Source: U.S. Department of Energy, Advanced Manufacturing Office

Program Period: 11/1/2009 to 10/31/2011

Funding Amount: \$500,000

Funding Source: American Recovery and Reinvestment Act

Program Period: 11/1/2009 to 9/30/2011



Project Success Highlights

- Successfully developed the Enhanced Energy Assessment Process (EEAP) and launched the Energy Efficiency Knowledge Center (EEKC) sample website.
- Completed two phases of trainings, comprising 13 unique training events.
- Identified at least 1,347,114 million Btu per year in energy savings.

Primary Investigators

West Virginia Division of Energy, Charleston, WV

Industries of the Future–West Virginia (IOF–WV), Morgantown, WV

Project Partners

E3M, Inc., North Potomac, MD

Northampton Community College Energy Management Institute, Bethlehem, PA

Southeast Missouri State University, Cape Girardeau, MO

Tennessee Technological University Industrial Assessment Center

West Virginia University Industrial Assessment Center, Morgantown, WV

incentives, rebates, and other financing options to enable the implementation of recommendations. The post-assessment period is also extended with the team conducting follow-ups to measure and assist with implementation.

Progress and Milestones

Activity Description	Goal	Completed to Date (Reg. Project Funding)	Completed to Date (ARRA)
Assessments	31	19	10
Identified Energy Savings (Million Btu)	-	1,700,000	1.1
Implemented Energy Savings (Million Btu)	-	67,318	-
Trainings	0	11	6
Individuals Trained	-	107	46
Pilots / Demonstrations	1	1	1
Plants Impacted	-	236	13

(As of June 2011)

All of the information gained during the assessments is incorporated into another project that the West Virginia team is working on—the Energy Efficiency Knowledge Center (EEKC).

During Phase I of the project, the team has completed a total of 29 energy assessments and provided 129 technical assistance activities to clients, as well as nine onsite trainings. Thus far, the team has identified significant energy savings potential in the region:

- 1,347,114 million Btu per year in energy savings
- \$10,172,303 per year in cost savings
- 93,276 metric tons of carbon dioxide reductions.

For Additional Information:

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Benefits

- Projected 4% regional reduction in industrial energy intensity for 10 years.
- Projected regional reduction of 26.34 million metric tons of carbon dioxide.
- Reduced energy intensity and carbon emissions at medium- and large- sized industrial plants in West Virginia, eastern Ohio, western Pennsylvania, eastern and central Kentucky, eastern and central Tennessee, and southwestern Virginia.
- Delivered an enhanced assessment process for a customized approach.
- Improved media outreach on energy assessments and energy-saving tools.

Applications in Our Nation's Industry

This project will expand a partnership among academia, state offices, and utilities that will continue to help reduce the energy intensity of industrial manufacturers in West Virginia, Ohio, and Pennsylvania.

A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.