

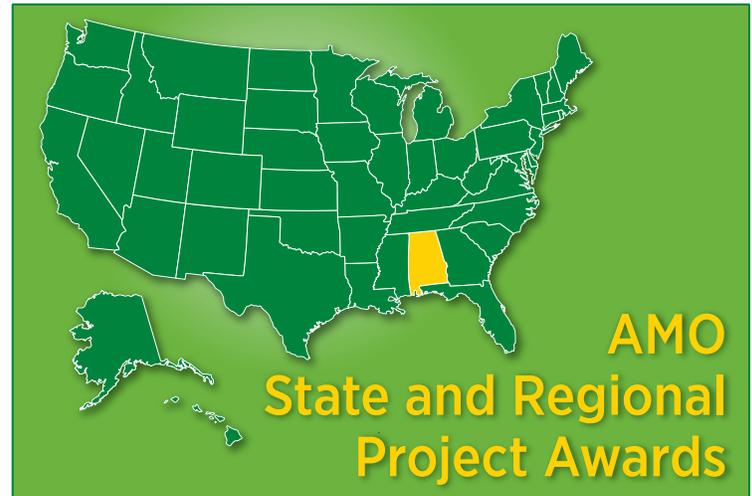
Alabama Save Energy Now – Reducing the State’s Industrial Energy Intensity

With a variety of energy-intensive industries—such as chemicals, metals, pulp, and paper—located within the state, Alabama ranks eighth among states as the largest industrial energy user. Due to this high concentration of industry, the Alabama Department of Economic and Community Affairs (ADECA) formed a team, including the Alabama Technology Network (ATN) and the Alabama Industrial Assessment Center (AIAC), to inform industrial facilities about the resources available through the U.S. Department of Energy (DOE) Advanced Manufacturing Office (AMO). The team also looks to provide companies with assessments, implementation assistance, education and training at local centers, energy technology demonstrations, and marketing and outreach to effectively lower the energy consumption within the state’s industrial sector. The *Save Energy Now* project aims to work with small, medium, and large industrial companies to reduce their energy intensity by a minimum of 2.5% each year, as well as to increase their continuous energy improvement capabilities.

The project team offers a comprehensive marketing and outreach strategy to deliver improved industrial energy efficiency through statewide industrial engagement in efficiency implementation and best practices. In addition, the *Save Energy Now* initiative will set the groundwork for establishing state legislature-sponsored funding to support industrial energy efficiency in the years following project completion.

AIAC and ATN are conducting both energy and lean assessments, offering a mix of two-day and one-day assessments to companies of all sizes. These assessments are being supported with technical and financial implementation assistance. In addition to utilizing the strong ties that AIAC and ATN have with manufacturing associations in the state, the team is working with ADECA to identify and recruit plants to participate in the assessments. Goals and accomplishments for the team are as follows:

- Offering three levels of energy assessments: (1) IAC assessments for medium- sized manufacturers; (2) *Save Energy Now* assessments for large industrial facilities; and (3) Practical Energy Assessments for smaller industrial clients.
- Establishing an Implementation Clearinghouse of information on state and federal tax incentives, loan guarantee programs, and lists of energy savings corporations and engineering firms available to assist clients with energy saving project implementation.
- Offering three types of training programs: (1) DOE/AMO training, such as Qualified Specialist training; (2) train-the-trainer Practical Energy training to identify simple efficiency improvement opportunities; and (3) two annual utility training



Project Description

Funding Amount: \$900,000

Funding Source: American Recovery and Reinvestment Act of 2009 (ARRA)

Program Period: 9/30/2009 to 9/30/2013



Project Success Highlights

- Exceeded the goal of 32 energy and lean assessments by completing 34 assessments that have identified \$3.0 million in annual energy savings opportunities.
- 14 assessment clients have received post-report implementation assistance following the assessment.
- A technology demonstration on biomass energy technology, including an on-site tour, was held at Clark County Pole and Piling in March 2011.
- 5 training sessions have been completed, resulting in 7 SSAT qualified specialists trained and 22 End-users trained.

Primary Investigator

Alabama Department of Economic and Community Affairs,
Montgomery, AL

Project Partners

Alabama Technology Network, Birmingham, AL
Alabama Industrial Assessment Center, Tuscaloosa, AL
University of Alabama, Tuscaloosa, AL
Alabama Power, Birmingham, AL
Tennessee Valley Authority, Chattanooga, TN
Manufacture Alabama, Montgomery, AL
Alabama Automotive Manufacturer’s Association, Birmingham, AL
Alabama Aerospace Industry Association, Birmingham, AL
Specification Rubber Projects, Inc., Alabaster, AL
University of Alabama in Huntsville, AL

workshops to highlight the IAC and *Save Energy Now* protocols and application processes. Training participants are being surveyed to ensure successful, continuously improved sessions.

- Assisting plants with overcoming the implementation hurdle by offering alternative energy technology demonstrations and showcases, as well as developing case studies of successful projects.
- Promoting activities and resources by staffing tradeshow booths, creating a website and brochures, holding webinars, publishing media alerts, and presenting successful companies with awards.

Progress and Milestones

Activity Description	Goal	Completed to Date
Assessments	32	34
Identified Energy Savings (Trillion Btu)	1.011	0.34
Implemented Energy Savings (Trillion Btu)	-	-
Trainings	18	5
Individuals Trained	-	82
Pilots / Demonstrations	1	1
Plants Impacted	-	185

(As of June 2011)

The partnership between AIAC/ATN has increased the amount of information that has been shared and distributed; the collaboration has resulted in greater visibility for both partners to potential clients.

To date, the project has exceeded its goal of administering 32 energy and lean assessments to large, medium, and small companies. These assessments have resulted in \$3.0 million per year in energy savings opportunities—approximately 158,400 million Btu per site per year. An additional 9 assessments have been scheduled through the end of 2011. To increase the level of implementation resulting from these assessments, the team is conducting follow-up with clients at 6- and 12-month intervals after completion of the assessment report. Currently, of 28 energy assessments conducted, 14 have received post-report site visits.

The project also has contributed to formation of an Economy, Energy, and Environment (E3) Initiative in Alabama. This initiative is a collaborative effort between federal, state, and local agencies and companies to help manufacturers to adapt and succeed in a new business era focused on sustainability. The E3 Initiative has leveraged additional resources to benefit program clients, including significant implementation assistance from ADECA and American

4 Year Project Benefits

- Reduced energy intensity and related carbon emissions at small, medium, and large industrial plants in Alabama by 2.5% annually.
- Projected energy savings of 1.011 trillion Btu per year.
- Projected carbon dioxide emissions reductions of 217,000 tons per year.
- Increased education and implementation of energy-management Best Practices.

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 Alabama. The industrial energy efficiency project will reduce industrial energy intensity and its associated carbon emissions throughout the state.

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.

Recovery and Reinvestment Act state energy projects and the “Alabama Saves” Energy Revolving Loan Fund (created with American Recovery and Reinvestment Act funds, as well).

The project also has made significant progress in its marketing and outreach efforts. Two case studies have been developed and are in the process of being published. To date, presentations have been made at four quarterly meetings of the Alabama Automotive Manufacturers Association (AAMA), one Alabama Aerospace Industry Association (AAIA) event, and one Manufacture Alabama (MA) event. The project also has completed one webinar.

The team held a DOE/AMO BestPractices qualification training focusing on steam systems in December 2010, as well as a DOE/AMO End User training session on steam systems. Two Practical Energy training sessions were held, and sessions to serve an additional 13 manufacturers are in the planning stage. A best practices sharing, training, and information event was conducted for utilities and MEP representatives in March 2011. Four training sessions occurred during April–June 2011.

For Additional Information:

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