

INDUSTRIAL TECHNOLOGIES PROGRAM

Reducing Industrial Energy Intensity in Alabama

With a variety of energy-intense industries, such as chemicals, metals, pulp, and paper, Alabama ranks eighth among the states as the largest industrial energy user. Due to this high concentration of industry, the Alabama Department of Economic and Community Affairs (ADECA) has formed a team, including the Alabama Technology Network (ATN) and the Alabama Industrial Assessment Center (AIAC) to inform industrial facilities about the U.S. Department of Energy (DOE) Industrial Technologies Program (ITP) resources and to provide companies with assessments, training, and implementation services. The project aims to work with small,

medium, and large industries to reduce their energy intensity by a minimum of 2.5 percent each year and to increase their energy-management capabilities.

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





Benefits

- Reduced energy intensity and related carbon emissions at small, medium, and large industrial plants in Alabama by 2.5 percent
- 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 BestPractices.

Applications in Our Nation's Industry

This project will establish a partnership among academia, utilities, energy service providers, and the state to identify and help implement opportunities for Alabama's industrial manufacturers to save energy, reduce carbon emissions, and increase economic competitiveness. Industrial energy intensity will be reduced by a minimum of 2.5 percent during the project period.

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Project Description

AIAC and ATN will offer energy and lean assessments, offering a mix of two-day and one-day assessments to companies of all sizes. These assessments will be followed with implementation support. In addition to utilizing the strong ties AIAC and ATN have with manufacturing associations in the state, the team will work with ADECA to identify and recruit plants to participate in the assessments. The team will

- Offer three levels of energy assessments:
 - IAC assessments for mediumsized manufacturers;
 - 2) Save Energy Now (SEN) assessments for large industrial facilities; and
 - 3) Practical Energy assessments for the smaller industrial clients.
- Establish 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.
- Offer three types of training programs:
 - 1) DOE/ITP training, such as Qualified Specialist training;
 - train-the-trainer Practical Energy training to identify simple efficiency improvement opportunities; and
 - two annual utility training workshops to highlight the IAC and SEN protocols and application processes. Training

participants will be surveyed to ensure successful, continuously improved sessions.

- Assist plants with overcoming the implementation hurdle by offering alternative energy technology demonstrations and showcases, and developing case studies of successful projects.
- Promote activities and resources by staffing tradeshow booths, creating a Web site and brochures, holding webinars, publishing case studies and media alerts, and awarding successful companies.

Progress and Milestones

The project's planned tasks include

- Performing 20 assessment days each year for plants of all sizes, 18 Practical Energy assessments at small plants, and 38 Lean Manufacturing assessments at all assessment sites.
- Performing client follow-ups at 6and 12-month intervals following each assessment.
- Establishing and sustaining an Implementation Clearinghouse to provide incentive information and implementation resources that will assist clients.
- Computing and reporting metrics on industrial energy intensity (pre- and post-implementation) using actual utility bill and production data from the plant.

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, Huntsville, AL

For Additional Information

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