

INDUSTRIAL TECHNOLOGIES PROGRAM

Southeast Industrial Energy Alliance

Energy efficiency is a priority for the Southeast states of Arkansas, Georgia, North Carolina, Tennessee, and Virginia whose manufacturers are among the country's largest industrial consumers of energy. These plants are, therefore, prime candidates for reducing energy intensity and helping the U.S. lessen its dependence on foreign oil. Improving the energy efficiency of the manufacturing plants in the Southeast will help to reduce their carbon footprints and improve their competitiveness by reducing their energy costs. Led by the Georgia Environmental Facilities Authority, the Southeast team's multifaceted approach to helping reduce industrial energy intensity in the region consists of conducting energy assessments, conducting a demonstration program to implement an ANSIaccredited Plant Certification program, hosting end-user and Qualified Specialist training, technology demonstrations, and implementing a marketing and outreach strategy. The team's approach contains an education component which ensures that energy assessment or training participants are given the skills to carry out this work long after the project term ends.





Benefits

- It is anticipated that the Southeast team's efforts will directly lead to energy reduction of 6.4 trillion Btu in the region.
- Greenhouse gas emissions will be reduced by more than 523,000 metric tons.
- Manufacturers in the Southeast region will receive training that will provide them with skills to reduce energy intensity, reduce waste, and improve overall plant system performance.

Applications in Our Nation's Industry

This project will enhance the partnership among academia, national laboratories, industrial manufacturers, state energy offices, and private consultants to expand their existing efforts of reducing industrial energy intensity in Arkansas, Georgia, North Carolina, Tennessee, and Virginia

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Project Description

The team will implement the following strategies to help reduce industrial energy intensity and related carbon emissions in the Southeast region:

- Energy Assessments and Technical **Assistance:** Utilizing DOE/American Society of Mechanical Engineers assessment standards, the Southeast team will conduct no-cost energy assessments in industrial facilities in Arkansas, Georgia, North Carolina, Tennessee, and Virginia. Energy System Experts will identify opportunities to lower energy intensity in compressed air, process heating, pump, and steam systems. The team will locate potential resources to help finance the recommended energy efficiency improvements as well as provide technical assistance.
- Plant Certification: The Southeast team is in a unique position to pilot the plant certification in the region due to Georgia Tech's development of the ANSI National Standard, ANSI/MSE 200 and its involvement in the initial efforts to implement ANSI-accredited certification for energy efficiency in plants. The team will help prepare participating plants for certification and provide training for state partners to deliver plant certification services. An audit will be conducted at the end of the implementation program.
- **Training:** Local training centers will be established in Arkansas, Georgia, North Carolina, Tennessee, and Virginia. Each center will provide end-user and Qualified Specialist training.

- Technology Demonstrations: The team will help demonstrate and commercialize energy-efficient industrial technologies. It will implement a vetting process to determine which technologies should be selected, as well as identify independent third-party companies that can credibly and accurately evaluate the results of the demonstration. The team will document all results and implement a communications strategy to keep partners and plants aware of the technology and its results.
- **Outreach:** The team's communications and outreach strategy will involve recruiting industrial partners, identifying similar industrial efficiency programs and activities, developing a recognition program, and creating and distributing outreach materials.

Progress and Milestones

The project includes the following planned tasks:

- Train 18 Energy System Experts in conducting energy assessments by the end of the project period.
- Host two technology demonstrations.
- Establish five Local Training Centers
- Provide outreach to an estimated over 3,000 partners and industrial facilities in the region.

Primary Investigator

Georgia Environmental Facilities Authority, Atlanta, GA

Project Partners

Arkansas Economic Development Commission, Little Rock, AR BCS, Incorporated, Laurel, MD Georgia Tech Enterprise Innovation Institute, Atlanta, GA North Carolina Industrial Extension Service, Charlotte, NC North Carolina State University, Raleigh, NC Oak Ridge National Laboratory, Oak Ridge, TN Southeast Energy Efficiency Alliance, Atlanta, GA

Tennessee Department of Economic and Community Development, Nashville, TN

Tennessee State Energy Division, Nashville, TN

Virginia Department of Mines, Minerals and Energy, Richmond, VA

For Additional Information

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