

New Jersey Industrial Energy Program

New Jersey is home to energy-intensive industrial manufacturing sectors, such as chemicals, computers and electronics, and transportation equipment. In 2007, industrial manufacturing in the state contributed to approximately 10% of New Jersey's gross domestic product and 20% of the state's energy usage, consuming 452.1 trillion Btu. The Center for Advanced Energy Systems (CAES) at Rutgers University and its project partners will establish the New Jersey Industrial Energy Program (NJIEP). The NJIEP will inform industrial facilities about industrial energy efficiency resources available through the U.S. Department of Energy (DOE) Advanced Manufacturing Office (AMO). The goal of NJIEP is to reach 10% of the AMO goal in reducing the state's industrial energy intensity by 2.5% each year of the two-year project period, or 5% overall. NJIEP will also provide industrial companies with energy assessments, energy management training, outreach and marketing services, and implementation assistance.

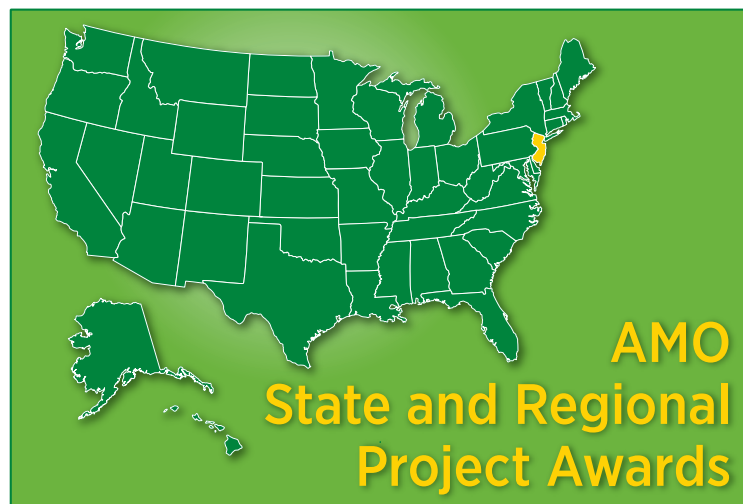
The project aims to establish partnerships among DOE, state and local government, universities, end users, utilities, and nongovernmental organizations (NGOs) to reduce industrial energy intensity. After the three-year federal funding period, the initiative will be supported by state and private funds. To accomplish this, a network of companies is being developed from three large industries in the state—pharmaceutical, utilities, and the food industry.

Progress and Milestones

Activity Description	Goal	Completed to Date
Assessments	18	2.5
Identified Energy Savings (Trillion Btu)	2	0.07
Implemented Energy Savings (Trillion Btu)	1	0
Trainings	5	2
Individuals Trained	2000	210
Pilots / Demonstrations	5	2
Plants Impacted	125	40

(As of June 2011)

In support of marketing and outreach activities, the NJIEP attended the New Jersey Food Processors Association (NJFPA) 2011 Annual Meeting and Conference on January 31, 2011, in order to make new contacts. The event featured 36 exhibitors and approximately 200 attendees. The project is focusing on expanding outreach efforts to the New Jersey Business and



Project Description

Funding Amount: \$350,000

Funding Source: American Recovery and Reinvestment Act

Program Period: 10/28/2010 to 9/30/2012



Project Success Highlights

- Deployment of smart meter technology at Swepeco Tube Inc.
- Vendor proposal reviews completed for photo voltaic systems.
- Development of a technical resource Web page with a focus on next generation technologies (<http://njiep.rutgers.edu/>).

Primary Investigator

Center for Advanced Energy Systems of Rutgers, The State University of New Jersey, Piscataway, NJ

Project Partners

New Jersey Board of Public Utilities, Office of Clean Energy, Newark, NJ
New Jersey Business & Industry Association, Trenton, NJ

Benefits

- Projected fuel savings of 151.7 billion Btu over the three-year project period.
- Projected electricity savings of 13,680 MWh over the three-year project period.
- Increased energy efficiency educational opportunities through training sessions and outreach services.

Industry Association (NJBIA), NJFPA members, and utilities, as well as Energy Service Companies (ESCOs) and state and federal organizations.

The NJIEP deployed smart meter technology at Swepeco Tube Inc. As a result, a case study will be developed to determine whether the meters can be used to optimize large equipment use and shave peak demand while not impeding production.

Several vendor proposal reviews have been completed in this period. The reviews gave plant personnel an unbiased technical look into the estimations from vendors. Additionally, NJIEP has conducted two training sessions to educate energy professionals on emerging technologies.

Future efforts of the program will include energy efficiency trainings and the addition of technical resources on the NJIEP web page (<http://njiep.rutgers.edu/>). NJIEP will offer energy efficiency related training courses for business owners, plant managers, facility engineers, and anyone else interested in energy conservation. Training courses will be scheduled as part of a two-day assessment—day one would provide an onsite training session and day two would involve an energy audit inclusive of the material discussed on the first day. The training module from the first task will be used and tailored to fit the needs of the plant. Technical resources to be featured on the website will include DOE emerging technologies, BestPractices Tools, and Industry Specific BestPractices manuals. These resources will assist manufacturing facilities through information dissemination. The number of hits on the website will be measured to evaluate the reach of the program and the usefulness of the content. Through partnerships with key stakeholders, such as the NJBIA and NJIEP, CAES will add an “Energy Column” to newsletters, thus reducing costs. This column will be used for sharing energy efficiency technology developments, case studies, and best practices as observed in project research or assessment work.

For Additional Information:

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Applications in Our Nation's Industry

This project will establish partnerships among DOE, state and local governments, universities, end users, utilities, and NGOs to reduce industrial energy intensity in New Jersey and provide companies with site assessments, energy efficiency training, marketing and outreach services, and implementation assistance.

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.

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