



INDUSTRIAL TECHNOLOGIES PROGRAM

Reducing Industrial Energy Intensity in the State of New York

Realizing the potential for increased energy and cost savings, the New York Public Service Commission enacted an Energy Efficiency Portfolio Standard (EEPS) that would help the state reduce electricity and natural gas consumption by 15 percent by 2015 (*15 in 15*) through its Industrial and Process Efficiency Program. This translates to an industrial energy reduction of 6.4 trillion Btu and an annual CO₂ reduction of 0.51 million metric tons by 2015.

The New York State Energy Research and Development Authority (NYSERDA)

has therefore been tasked to offer energy efficiency programs to help the state be in compliance with EEPS. NYSERDA has come up with innovative programs to help New York industrial manufacturers improve their energy efficiency and help the state reach its *15 in 15* goal. NYSERDA will partner with various universities and manufacturing associations to benchmark industrial energy and carbon intensity in New York, establish a partnership network, help finance feasibility studies, and institute a network of process consultants.



Benefits

- Helping industry in New York substantially reduce their energy intensity and consumption by 2015 to comply with the state's 15 in 15 goal
- Achieving electric energy reduction of 84,000 MWh (or 10 percent) over the project period
- Achieving an energy cost savings for large manufacturers in New York of more than \$11 million annually

Applications in Our Nation's Industry

This project will establish a partnership among academia and industry associations that will continue to help reduce the energy intensity of industrial manufacturers in the state. The New York team's industrial energy efficiency program will reduce industrial energy intensity and its associated carbon emissions.

Project Description

The overall objectives of the New York team's plan are to accurately measure industrial energy and carbon intensity, form strategic partnerships with industrial associations, help finance cost-shared feasibility studies, and develop a network of industry process consultants. The work will be focused on upstate New York, which has the heaviest concentration of industry in the state. The team anticipates achieving these goals by implementing the following plan:

- In order to quantify potential energy and carbon savings, the team will first establish the benchmark of current amount of energy consumption and carbon emissions at industrial facilities in New York. The team will then conduct a market characterization study to identify which industrial sectors should be targeted for energy assessments.
- Next, the team will establish and convene an industrial partnership network as part of its marketing and outreach strategy. The partnership network will meet annually to discuss industrial energy efficiency and will actively disseminate energy efficiency information and recruit its industrial members to participate in NYSERDA's industrial energy efficiency programs.
- Energy assessments will be conducted at large electricity-consuming plants by members of the New York team. The team will perform walkthroughs of select industrial facilities, provide technical assistance for reduced energy

intensity and carbon emissions, and calculate potential cost savings if certain improvements are implemented.

- Finally, the team will compile a list of national process consultants for additional information on improving process-specific energy efficiency.

Progress and Milestones

The project's planned tasks include:

- Benchmarking energy-use intensity and carbon emissions analysis
- Reporting on benchmarking and target assessment market
- Conducting an annual meeting and ongoing end-user meetings
- Distributing copies of materials to the partnership networks' industrial memberships
- Providing an annual report of approved studies and performance-based installations resulting from partnership network recruitment
- Conducting energy assessments
- Preparing an annual report on successful energy assessments
- Compiling a list of national process consultants.

Primary Investigator

New York State Energy Research and Development Authority, Albany, NY

Project Partners

ANTARES Group, Landover, MD
Manufacturing Association of Central New York, Syracuse, NY
Multiple Intervenors, Albany, NY
State University of New York
Environmental Science and Forestry, Syracuse, NY
Syracuse Center of Excellence in Environmental and Energy Systems, Syracuse, NY
Syracuse University Industrial Assessment Center, Syracuse, NY

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.

For Additional Information

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