

New York State Energy Research and Development Authority (NYSERDA)
Residential Efficiency and Affordability Program
“Galaxy” Star of Energy Efficiency

Nomination Summary

When it comes to solving the issues of access to affordable energy and improving the environment, New Yorkers look to the New York State Energy Research and Development Authority (NYSERDA) for answers. Through its Residential Efficiency and Affordability Program (REAP) and Commercial/Industrial Program, NYSEDA deploys proven energy efficiency and building performance strategies, services and products throughout the state.

Residential Efficiency and Affordability Program (REAP)

REAP serves residents and/or owners of single-family and multi-family buildings, building professionals and trade allies. The program also incorporates ways for low-income households to reduce the burden of energy costs. Home Performance with ENERGY STAR® and the New York ENERGY STAR® Labeled Homes programs under REAP have consistently driven remarkable energy and environmental savings for the last several years. With Home Performance with ENERGY STAR, any existing home can be improved to use up to 40 percent less energy. New York ENERGY STAR Labeled Homes use approximately 30 percent less energy than conventionally built new homes.

In 2007, the number of Home Performance with ENERGY STAR completed jobs were 5,816 and 2,490 New York ENERGY STAR Labeled Homes were built, saving \$8.7 million in energy costs, 8.7 million kilowatt-hours of electricity and more than 325 billion BTUs of oil and gas for the year. The collective energy savings from these programs kept more than 6,211 metric tons of carbon monoxide from the atmosphere for 2007, the same as taking more than 1,138 cars off the road.

Commercial/Industrial

New York’s commercial and industrial sectors account for nearly 35 percent of the state’s net energy use and reducing energy use in these sectors has a significant positive effect on the state’s economy, environment and demand for electricity. NYSEDA's Commercial/Industrial programs provide energy efficiency services for existing buildings, new construction, industrial facilities, and vehicle fleets. The program serves businesses, industry, agriculture, institutions including schools, healthcare facilities, colleges and universities, municipalities, state agencies and authorities, and transportation systems. NYSEDA has taken the lead on several commercial and industrial innovations that include:

- Improving system reliability through its Peak Load Management Program (PLMP), which has reduced summer coincident peak demand by approximately 525 MW since 2000. PLMP outreach and direct incentives have increased the number of demand response providers from eight to 30.
- Establishing a precedent for green, energy efficient commercial buildings that exceed the New York State Energy Conservation Construction Code by 18 percent.
- Building a broad network of energy service providers that include more than 730 partners, resulting in more than 2 MW of electric demand reduction and more than 10 GWh of electricity energy savings.
- Developing an alternative fuel vehicle program that has deployed compressed natural gas, hybrid-electric and hybrid-CNG vehicles that to date have displaced nearly 45 million gallons of petroleum and reduced emissions by 1,800 tons of nitrogen oxides, 100 tons of particulate matter, 115,000 tons of carbon dioxide, 7,100 tons of carbon monoxide and 260 tons of hydrocarbons over the life of these vehicles.
- Leveraging more than \$680 million in energy-saving capital improvements since 1999.

The powerful results obtained through REAP are driven by a market transformation strategy that includes sustained outreach to program partners, aggressive marketing efforts and strong synergies with other REAP initiatives. Residential programs focus on increasing consumer demand and midstream level incentives to change the supply characteristics of the marketplace – from what manufacturers produce and the levels of product that retailers stock, to what practices trade groups, builders, and contractors support. NYSEDA's Commercial/Industrial Program focuses on helping New York State manufacturers adopt energy-efficient, environmentally friendly technologies to reduce costs, and helps the state's manufacturers to develop energy efficient and environmentally desirable products that are sold all over the world. These activities translate into more jobs, a healthier economy, and a healthier environment in New York State.

