

ENERGY EFFICIENCY AT WORK

Energy Conscious Blueprint



[Case Study: Stop & Shop

CL&P's Energy Efficiency Team Helped Stop & Shop's Stamford store:

- Save approximately \$33,000 and 265,000 kilowatt-hours annually
- Defray their investment with a \$53,623 incentive
- Achieve a lifetime savings of over 3,595,000 kilowatt-hours

Efficient use of electricity slows down the need to build more power plants and results in fewer toxins emitted into our atmosphere.

The electricity saved on this project is the equivalent of approximately:

- 428 homes provided with electricity each year for the lifetime of the measures
- 3 tons of sulfur oxides emissions avoided
- 1,977 tons of carbon dioxide (a global warming gas) emissions avoided
- 1,848,318 pounds of coal not burned

This program is for business customers planning new construction, major renovations, new production or process equipment, or replacement of existing equipment near the end of its useful life. Benefits include financial incentives to offset the premium costs associated with energy-efficient technology.

This program is one of several innovative solutions offered by the Connecticut Energy Efficiency Fund and administered by Connecticut's utility companies. For a complete listing of energy-efficiency programs and services for electric and natural gas customers, visit www.CTEnergyInfo.com or your utility company's website.

DETERMINE YOUR OWN ENERGY FUTURE.



**Connecticut
Light & Power**

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www.CTEnergyInfo.com



The United Illuminating Company

Connecticut's Energy Efficiency Fund programs are funded by the Conservation Charge on customer electric bills. This information paid for by CL&P customers. | For more information: 1-877-WISE-USE • www.cl-p.com

Energy Efficiency Case Study: Stop & Shop

CL&P, through the Connecticut Energy Efficiency Fund (CEEF), can help you manage your energy costs, improve productivity, and protect the environment the way we did for Stop & Shop.

Background

Stop & Shop was founded in Massachusetts in 1914 by the Rabinovitz family as the Economy Grocery Stores Company. By 1947, there were 86 supermarkets and a new name: Stop & Shop. The first Super Stop & Shop pioneered the superstore concept in New England in 1982. In 1996, the Company was acquired by Ahold, which employs 450,000 people and serves 40 million customers worldwide. Based in Quincy, MA., Stop & Shop now operates more than 385 stores, employing 59,900 associates, in six northeastern states.

In 2005 Stop & Shop started the construction of a new store in Stamford, Connecticut. From the start, they worked with CL&P through its Energy Conscious Blueprint program — a program that enables companies to design-in energy efficiencies as part of the initial blueprint — when they are most cost-effective.

The Challenge

Stop & Shop is seriously committed to preserving the environment and has put in place many conservation initiatives. Stop & Shop stores recycle plastic shopping bags and store-generated shrink/pallet wrap. Its recycling vendor then uses the plastics to make composite decking. Last year, Stop & Shop and other Ahold stores recycled more than 1,500 tons of plastics and more than 100,000 tons of cardboard. To reduce fuel usage, Stop & Shop uses truck idling systems that turn off the engines of parked trucks when left running for too long. When it comes to energy conservation, Stop & Shop is taking a leadership role in the grocery industry. White reflective thermoplastic polyolefin (TPO) has been installed on the roofs of 70 of its stores to reflect solar radiation. This reduces air conditioning needs by about 96,000 BTUs in each store.

Naturally, when it began planning its new Stamford store, the company wanted to build-in even more energy-efficiency measures.



CL&P's Solution

Lighting

An obvious and very visible efficiency measure was made to the new store's lighting. Instead of the typical metal halide fixtures used in their older stores, CL&P's Energy Conscious Blueprint program provided incentives to help offset the cost of installing high-efficiency lighting systems. Not only did this lower energy costs, their improved white light makes the products look better than the yellow or orange light produced by older-style fixtures. The lighting was also tied into a daylight dimming system. Controlled by photocells, the fixtures near the windows can dim or even shut off on sunny days, as they adjust to the available sunlight. Occupancy sensors were installed in less frequented areas such as stock rooms for even more energy savings.

Incentives provided through the CEEF also applied to an LED lighting system that was installed inside the store's signs. The LED system replaced an existing neon lighting system which used more energy and required frequent maintenance.

“Partnering with CL&P and the Connecticut Energy Efficiency Fund meant that we could plan for and build-in the energy-efficient measures that in the past were cost-prohibitive.”

Paul Grenier,
Corporate Energy Analyst,
Stop & Shop

HVAC

The Energy Conscious Blueprint program enabled Stop & Shop to install high-efficiency HVAC equipment and an ENERGY STAR® transformer instead of standard equipment. CEEF incentives covered the incremental cost of the more efficient system and Stop & Shop will continue to benefit from the energy savings for years to come.

Premium-Efficiency Motors

Another measure was the installation of premium-efficiency motors. These motors use less energy and will last longer than standard models. Again, CEEF incentives covered the difference in cost.

Benefits

- ★ Using CEEF funding, CL&P pays the difference between standard and more energy-efficient equipment.
- ★ Energy upgrades translate into customer savings on monthly electric bills for the life of the equipment.
- ★ For new construction and major renovations, CL&P's Energy Conscious Blueprint program reduces capital and operating costs. CL&P helps in the development and evaluation of energy-saving upgrades.
- ★ The Energy Conscious Blueprint program pays up to 100% of the incremental cost on all qualifying energy-efficiency measures.

(All commercial and industrial customers are eligible. Zero-percent financing available to industrial customers in good credit standing with CL&P.)