

Energy Efficiency

INVESTING IN CONNECTICUT'S FUTURE



REPORT OF THE
ENERGY CONSERVATION
MANAGEMENT BOARD
YEAR 2007 PROGRAMS AND
OPERATIONS
MARCH 1, 2008

PREPARED FOR:
THE CONNECTICUT LEGISLATURE
■ ENERGY & TECHNOLOGY COMMITTEE
■ ENVIRONMENT COMMITTEE

Determine Your Own Energy Future

Connecticut Energy Efficiency Fund
Programs are funded by the Conservation
Charge on customer bills

Energy Efficiency: the “First Resource”



Energy efficiency is the quickest, least expensive and cleanest way to extend the world's energy supplies; in other words, it is the first resource for additional energy capacity.

Investments in efficiency could reduce U.S. electricity use in 2020 by about 2,900 billion kWh. A reduction of this scale is equivalent to 70 percent of the nation's current annual electricity consumption, according to the Clean Energy Blueprint study prepared by the Union of Concerned Scientists.

It has been said that our nation has “Saudi Arabia-sized oil reserves right under our feet through energy efficiency.” Instead of using heavy machinery, our efficiency resource can be tapped by drilling into the ample reserves of the nation's innovators, technology developers and skilled workers. Extracting this efficiency resource will yield additional benefits by improving environmental quality and creating employment opportunities for workers across industry sectors at all levels.

Energy efficiency can improve both the economy and our quality of life. Efficiency investments create more jobs per dollar than investing in conventional energy supplies, according to the American Council for an Energy-Efficient Economy (ACEEE). Efficiency means neither sacrifices in quality of life nor adoption of strategies that would slow economic development by cutting energy use.

Economic growth is stimulated through energy efficiency by increasing the volume of products and energy services generated for each unit of energy consumed. Efficiency investments free resources for production of other high-value goods and services, creating a wave of economic stimulus that ripples throughout the economy.

Efficiency has met 84 percent of all new demand for energy services nationwide since 1996, reports the ACEEE.¹ Energy efficiency has outperformed conventional energy supplies by a five-to-one margin. Yet, the tremendous potential for efficiency as a resource has historically been hidden and largely untapped because it lacks the visible infrastructure of power plants and refineries.

As the clean energy imperative and associated economic opportunities become increasingly clear, the national spotlight has turned toward energy efficiency.

1 Laitner, J.A., Ehrnhart-Martinez, K. and W.R. Prindle. The American Efficiency Investment Market: A White Paper Prepared for the Energy Efficiency Finance Forum. April 2007. ACEEE. <http://www.aceee.org/conf/07finance/financeforumwp.pdf>

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From the Chair and Vice-Chair



Richard W. Steeves



Jeffrey Gaudiosi

2007 was a watershed year for energy efficiency in Connecticut. New legislation established efficiency mandates designed to produce substantial savings for energy consumers and keep Connecticut at the forefront of energy efficiency nationwide. In this year's annual report on the operations of the Connecticut Energy Efficiency Fund (CEEF), the Energy Conservation Management Board (ECMB) is pleased to reflect on past achievements and look forward to new opportunities and challenges.

The ECMB was created by state law and is charged with advising and assisting in the development, implementation and oversight of energy efficiency programs carried out by the state's two electric distribution companies, three natural gas distribution companies, and the Connecticut Municipal Electric Energy Cooperative (CMEEC) (Conn. Gen. Stat. §§16-245m, 16-32f and 7-233y). Since the ECMB's formation, the Board has worked with national energy efficiency experts to create effective programs and maximize benefits for Connecticut's energy consumers.

We have already achieved a great deal. Connecticut has repeatedly been recognized by the American Council for an Energy Efficient Economy (ACEEE) as a national leader in energy efficiency and our award-winning programs are viewed as models for other states to emulate. The numbers speak for themselves. Since 1998, the ECMB has overseen CEEF programs for homes and businesses throughout Connecticut, resulting in demand reductions equivalent to the generating capacity of a 500 MW power plant. This additional capacity, produced entirely through energy efficiency, is enough to power nearly 43,000 homes; the associated emissions reduction is equivalent to taking 37,000 cars off the road each year.

The lifetime cost per kilowatt hour (kWh) of additional electrical capacity made available through energy efficiency is far less than the cost per kWh for traditional electricity generation by coal, oil, or gas. In other words, the least expensive kilowatt hour is the one not used. Moreover, offsetting some of the need for new capacity through efficiency yields public health and environmental dividends for our region by lowering particulate emissions and reducing our "carbon footprint." Clearly, efficiency has been and will continue to be an important resource for Connecticut.

Now, Connecticut is poised to achieve even more through energy efficiency. In 2007, the General Assembly passed An Act Concerning Electricity and Energy Efficiency (Public Act 07-242), sweeping legislation that will empower Connecticut to determine its energy future for many years to come. PA 07-242 envisions efficiency as the centerpiece of a statewide energy policy that will mitigate rising consumer costs, maximize available resources, improve environmental quality, and spur economic development. This legislation outlines an array of efficiency-related mandates and assigns implementation and oversight responsibility, for the most part, to the ECMB. Thus, we are faced with a tremendous opportunity to realize the benefits that striving for "all cost effective energy efficiency," as it is referred to in PA 07-242, can produce for our economy and our environment.

To date, the CEEF programs have been a resounding success. We are committed to working cooperatively with the General Assembly and all of Connecticut's energy stakeholders to devise mechanisms that will enable the ECMB to continue this trend and realize the full potential of energy efficiency for Connecticut.

Handwritten signature of Richard W. Steeves in cursive.

Richard W. Steeves
ECMB Chairperson

Handwritten signature of Jeffrey Gaudiosi in cursive.

Jeffrey Gaudiosi
ECMB Vice-Chairperson

Executive Summary

Energy efficiency is an exceedingly valuable resource for Connecticut. It is the first resource for additional energy capacity. As such, efficiency is a wellspring of consumer savings, a driver of economic growth, a reducer of air pollutants, and the most expeditious route to achieving greenhouse gas (GHG) reduction goals set out in the Governor's Climate Action Plan.

During 2007, the ECMB advised and assisted with a range of energy-efficiency programs that deliver significant energy savings to Connecticut ratepayers. Confronted with rising energy costs, the value of efficiency as a resource has never been higher. The energy savings from Connecticut's efficiency programs in 2007 will yield \$776.8 million in consumer savings over the life of the measures at today's rates, while at the same time providing a valuable hedge against climbing energy costs in the future.

While continuing to deliver valuable electrical energy savings to consumers during 2007, the ECMB worked to integrate the natural gas savings initiatives into Connecticut's efficiency program portfolio, in order to offer customers seamless energy efficiency services. This simple, fuel-blind approach affords program participants the opportunity to focus on ways to reduce monthly energy bills without worrying about program details.

Comprehensive legislation adopted in June 2007 is driving transformation of Connecticut's energy landscape. Public Act 07-242, *An Act Concerning Electricity and Energy Efficiency*, provides that the state's energy needs should first be met through all available energy efficiency and demand-side resources that are cost-effective, reliable and feasible. This is a deceptively simple declaration which involves a complex implementation challenge requiring sustained investment, and layers of multi-year research, analysis and planning on behalf of Connecticut's energy stakeholders.

What is the Energy Conservation Management Board?

In 1998, the Connecticut legislature created the Energy Conservation Management Board (ECMB) to advise and assist the state's two electric distribution companies—The Connecticut Light and Power Company (CL&P) and The United Illuminating Company (UI), collectively "the electric Companies", in development and implementation of energy-efficiency and load management programs (Conn. Gen. Stat. §16-245m). Subsequently, the legislature added oversight of conservation and load management programs of the gas public utilities—Connecticut Natural Gas Corporation (CNG), Southern Connecticut Gas Company (SCG), and the Yankee Gas Services Company (Yankee Gas), collectively "the gas Companies" (Conn. Gen. Stat. §16-32f), and the Connecticut Municipal Energy Efficiency Cooperative (CMEEC) (Conn. Gen. Stat. §7-233y). A primary statutory responsibility of the ECMB is advising and assisting the electric Companies, the gas Companies and CMEEC in the development and implementation of a comprehensive plan to implement cost-effective energy conservation and load management (C&LM) programs and market transformation initiatives. All electricity and gas consumers in Connecticut now receive the benefits of quality energy-efficiency and load management programs.

The ECMB is an appointed group of 14 members, representing a wide variety of public and private entities including all utility service customer classes (business, residential and low-income). The ECMB has retained national level energy-efficiency expert consultants to assist in development of highly effective, award-winning programs. The ECMB has also contracted with independent research organizations to evaluate the effectiveness of Connecticut's energy efficiency and load-management programs; these evaluations guide program improvements and inform the direction of future activities.

Energy-Efficiency Programs save energy by: 1) upgrading existing equipment with technically more advanced equipment capable of producing the same or an improved level of end-use service with less power; 2) facilitating the integration of energy-efficient equipment and technologies into new construction; 3) regular maintenance of existing equipment; or 4) changing behavior through education and access to information.

Weatherization is the practice of protecting a building and its interior from the elements, particularly sunlight, precipitation, and wind, and of modifying a building to reduce energy consumption and optimize energy efficiency.

Load Management Programs decrease use of power during peak demand periods by: (1) increasing the efficiency of energy use in end-use applications through technical improvements in equipment; or (2) influencing the timing of energy use through planning and/or advanced process monitoring and control instrumentation.

Demand-Side Management describes activities and measures installed at the customer premises, including energy efficiency and conservation, load management and distributed resources.

Public input and comments on Conservation and Load Management (C&LM) programs are essential to the effective development of Connecticut's energy efficiency infrastructure. The ECMB has put in place five processes to provide significant opportunities for public input and comment regarding C&LM programs, including proposals for products/technologies and program revisions:

1. Public comment at ECMB meetings
2. Focused topic discussions at ECMB meetings
3. Annual public forums
4. Consideration of specific products/technologies or program revisions
5. Public review of reports and plans

Public Act 05-01, *An Act Concerning Energy Independence* (EIA), also charged the ECMB with implementing programs that reduce Federally Mandated Congestion Charges (FMCCs). The Department of Public Utility Control (DPUC) is responsible for final approval of Connecticut Energy Efficiency Fund (CEEF) programs and EIA initiatives.

What is the Connecticut Energy Efficiency Fund?

The 1998 legislation creating the ECMB—Conn. Gen. Stat. §16-245m—also created the Connecticut Conservation and Load Management Fund, now known as the CEEF. The Connecticut legislature established the CEEF to provide funding for development and administration of cost-effective energy efficiency and load management programs to the state's residential and business customers.

CEEF programs help Connecticut electric consumers save money and energy, and ultimately protect the environment, by reducing demand for electricity generation. CL&P and UI administer the CEEF programs, serving residential customers, including those with limited incomes, and business and municipal customers. Connecticut's electric energy-efficiency programs are funded by a conservation charge on customers' electric bills.

Because energy efficiency is the most expeditious, cost-effective and environmentally sustainable source of additional energy capacity for Connecticut's growing economy, the CEEF is essential to the environmental quality, public health, energy security, and continued economic development of Connecticut.

The CEEF's primary objectives include: (1) advancing efficient use of energy; (2) reducing air pollution and other negative environmental impacts; and (3) promoting economic development and providing energy security/affordability. This annual report highlights how CEEF programs have addressed these primary objectives during 2007.

Primary Objective—Advancing the Efficient Use of Energy

CEEF programs are designed to reduce energy consumption overall and reduce electric load during periods of critical peak demand.

CEEF programs provided annual energy savings of approximately 355 million kWh in 2007. As a result of 2000-2007 CEEF programs administered by the C&LM departments of CL&P and UI, Connecticut businesses and residents will realize 31 billion kWh in lifetime electric savings. At an average price of \$0.1801/kWh, that is equal to a savings of \$63.9 million annually and a lifetime savings of \$776.8 million for business and residences throughout Connecticut.

Estimated peak demand reduction resulting from 2007 CEEF and EIA programs in Connecticut was 450,492 kilowatts (kW). Peak demand reduction can help address the needs of an overburdened transmission system and facilities and alleviates the potential risk of electricity shortages during periods of higher use, such as unusually hot summer days.

Primary Objective—Reducing Air Pollution and Negative Environmental Impacts

CEEF programs are designed to reduce air pollutants released during electrical generation. These pollutants include: sulfur oxides (SO_x), nitrogen oxides (NO_x) and carbon monoxide. In 2007, CEEF programs helped reduce these pollutant emissions by 440 tons per year (SO_x-336 & NO_x-104), over the entire lifetime of the measures installed.

Energy efficiency is now generally acknowledged as the lowest-cost and fastest-to-deploy resource to slow the growth of carbon dioxide GHG emissions and yields positive economic impacts. During 2007, CEEF programs helped to reduce CO₂ emissions by nearly 212,000 tons.

Primary Objective—Promoting Economic Development and Providing Energy Security/Affordability

Instances of CEEF program participation reached approximately 500,000 during 2007. In addition to those who participated directly, all Connecticut citizens benefit from CEEF programs through the economic development stimulated by energy efficiency. Moreover, all electricity customers have benefited from decreased demand on the ISO-New England system, through which Connecticut receives electric power, in part as a result of CEEF programs. This has prevented potential service interruptions throughout the region.

As they have in previous years, CEEF program implementation continues to support approximately 1,000 non-utility jobs within Connecticut's energy-efficiency industry. Many of these energy-efficiency and load management service companies are small businesses, which benefit directly from the success and continued funding of CEEF programs.

Energy efficiency is a proven way to reduce the cost of doing business for all companies, large and small. Thousands of Connecticut businesses have reduced overhead and increased profits by installing energy efficiency and load management measures in their facilities. These measures—ranging from energy-efficient lighting to replacement of old, inefficient motors with high-efficiency units—can significantly lower business operating costs and improve productivity. Thus, CEEF programs allow Connecticut companies to redirect operational investments away from the rising cost of energy toward their core business.

Peak Demand is the maximum amount of electricity required by all homes and businesses connected to the power grid measured in kilowatts (kW). Because electrical systems are sized to correspond with peak demand, lowering demand reduces the need for new generation to serve customers during peak periods. It also reduces the need to run older, less efficient power plants, improving environmental quality, lowering capital cost requirements, and making the savings available to consumers.

Distributed Resources are the use of customer-side generation, energy storage, load response, load management, or energy efficiency installed on the customer premises. Distributed resources are used primarily to address or reduce customer loads at their premises, as well as specific power reliability needs of the broader energy system.

Load Response programs provide payments to power users, such as manufacturing plants and office complexes, to reduce their electric load during periods of peak demand. Load response program participants are generally medium-to-large municipal or business users with 100 kW to 5,000 kW of load available to interrupt as required by ISO-NE.

Kilowatt Hour (kWh) is a unit of energy used to measure electricity consumption. Kilowatt hours are a convenient unit of measurement for household electric meters because the energy usage of a typical home during one month is several hundred kilowatt hours. Electricity bills are calculated, in part, based on price per kWh.

Connecticut Energy Efficiency Fund programs are funded by the conservation surcharge on customer electric bills.

Residential energy consumers, especially low-income customers, benefit economically from CEEF programs. The wide array of programs available to residential customers include: new construction programs; rebates for ENERGY STAR®-qualified lighting and appliances; weatherization services; and home energy assessments. The energy-efficiency measures installed through CEEF programs lower energy use and reduce monthly energy bills, enabling Connecticut residents to put more of their hard-earned dollars toward other household necessities.

Rising energy costs pose a particularly dangerous threat to Connecticut's low-income residents. These households may find themselves deciding between paying for electricity or paying for food, medical care or other necessities. This difficult situation can be improved by the CEEF's two low-income programs: CL&P's Weatherization Residential Assistance Partnership (WRAP) program and the UI Helps program. Through the activities of these programs in 2007, approximately 14,882 low-income customers received free weatherization services to make their homes more energy efficient and comfortable.

Meeting Connecticut's Energy Resource Needs Through Efficiency, Load Management, and Load Response

Connecticut's growing economy, increased use of modern digital controls, automated equipment and manufacturing processes, and the public expectation of always-on connectivity, are just some of the factors raising demand for electrical resources at the same time the cost of power in Connecticut is at an all-time high. Energy efficiency and load management technologies can be marshaled to cost-effectively compensate for our growing energy resource needs.

PA 07-242 is a legislative mandate for increased energy efficiency, which provides that the state's energy needs will first be met through all available energy efficiency and demand-side resources that are cost-effective, reliable and feasible. The legislation requires the ECMB to conduct an assessment of how best to stabilize or eliminate growth in electrical demand. In response to PA 07-242, ECMB consultants have advised the electric Companies in developing a comprehensive energy efficiency plan covering 3-, 5- and 10-year timeframes, which is the cornerstone of the Companies' Integrated Resource Plan (IRP).

National and Regional Awards

Every year since its inception in 2000, Connecticut has received top rankings in the annual nationwide *State Energy Efficiency Scorecard* compiled by the American Council for an Energy Efficient Economy for the conservation and load management programs administered by CL&P and UI. Connecticut's efficiency programs have also been repeatedly recognized for excellence by other state and federal agencies, including the U.S. Environmental Protection Agency (EPA), U.S. Department of Energy (DOE), and the Connecticut Quality Improvement Award Partnership (CQIA).

Connecticut Takes Nation's Top Honor for Energy Efficiency

The ACEEE *2006 State Energy Efficiency Scorecard* released in 2007 ranked Connecticut, along with Vermont and California, as the top states in the national race to adopt energy efficiency policies, programs and technologies. The ACEEE *Scorecard* recognizes those U.S. states that have enacted a range of innovative standards, codes and policies geared to improving national energy security while sustaining economic prosperity and environmental quality.

The ACEEE also bestowed honors in 2007 on individual CEEF programs. Five programs were recognized by ACEEE because of their effectiveness and exemplary approaches in assisting customers improve energy efficiency in their homes and businesses. The award winning CEEF programs administered by CL&P's and UI's C&LM departments in 2007 were: the Energy Conscious Blueprint Program; Small Business Energy Advantage Program; and the Energy Opportunities Program—each received an "Exemplary Program" recognition award. The Process Reengineering for Increased Manufacturing Efficiency (PRIME) Program and the Home Energy Solutions Program both received an "Honorable Mention" award. These programs facilitate energy efficiency through education, planning and technical assistance, and utilize dollar incentives to encourage participation.

Regional Collaboration: Working Together to Improve Energy Efficiency

Connecticut's prominence as an energy-efficiency leader was further advanced during 2007 by continued participation in several regional and national organizations and efficiency initiatives. Organizations in which the ECMB and electric Companies participated included: the ACEEE; the Consortium for Energy Efficiency (CEE); Northeast Energy Efficiency Partnerships (NEEP); and several other utility and public benefit fund organizations.

The most striking example of success in these collaborative efforts has been the approach developed for compact fluorescent bulbs. These bulbs are rebated through a competitive solicitation before they even reach the store shelves. The result is that consumers can purchase high-efficiency bulbs at reduced cost without having to take the extra step of submitting a mail-in rebate coupon.

In 2007, the ECMB and electric Companies continued to actively seek the assistance and involvement of design professionals and trade allies in implementing CEEF programs. In the residential sector, the electric Companies continued their partnerships with the EPA, the DOE, and other efficiency programs built around the ENERGY STAR® brand. These partnerships have led to more stringent efficiency criteria for clothes washers, dishwashers and residential light fixtures.



Northeast Energy Efficiency Partnerships, Inc.



Concerning Energy Efficiency Policy in Connecticut

Connecticut's energy efficiency and load management programs are viewed by other states as models of best practices.

A Brief History of Energy Policy Developments in Connecticut

The story of New England's transition to a system of market-driven energy resource procurement has played out across the region. In recent years, Connecticut has enacted a series of policies geared to benefit utility ratepayers and continue the state's legacy of energy efficiency leadership.

In 2004, the Federal Energy Regulatory Commission (FERC) asked Independent System Operator New England (ISO-NE) to develop market-based incentives for meeting the region's future capacity needs. ISO-NE proposed the Locational Installed Capacity (LICAP) market in which capacity payments were calculated using an established price curve based on supply. Because of concerns that LICAP would result in a competitive imbalance among regional generators, the program was twice delayed and ultimately replaced through a settlement process resulting in ISO-NE's creation of an alternate capacity market. The resulting settlement agreement, approved in June 2006, created the new Forward Capacity Market (FCM).

In 2005, the Connecticut legislature passed the *Energy Independence Act* (EIA) to help address the rising cost of energy confronting electric consumers. The EIA directed the DPUC to implement a variety of energy-efficiency and load response initiatives aimed at reducing Federally Mandated Congestion Charges (FMCC). The EIA provides a number of customer incentives to implement energy efficiency, demand reduction, and distributed generation measures. Throughout 2005, 2006 and 2007, the ECMB worked with the DPUC to maximize the benefits available to Connecticut's consumers through the EIA.

In 2007, the Connecticut legislature passed PA 07-242, *An Act Concerning Electricity and Energy Efficiency*. The Act requires an assessment of "how best to eliminate or stabilize growth in electrical demand" and incorporates "the impact of current and projected environmental standards, including those related to greenhouse gas (GHG) emissions and the Clean Air Act goals, and how different resources could help achieve those standards and goals." It is increasingly clear that a comprehensive efficiency and demand reduction strategy will make the state's commitments to reducing GHG emissions through participation in the Regional Greenhouse Gas Initiative more affordable; such a strategy can also effectively leverage GHG reduction activities to spur economic development statewide. This Act reaffirmed Connecticut's long-term commitment to energy efficiency as a cornerstone of the state's energy, environmental and economic development policies.

Energy Efficiency Takes Center Stage in 2007 Energy Bill

Public Act 07-242 provides that Connecticut's energy needs must first be met through all available energy efficiency and demand-side resources that are cost-effective, reliable, and feasible. PA 07-242 requires an assessment of how best to stabilize or eliminate growth in electrical demand, and mandates development of a comprehensive plan to secure cost-effective efficiency, while minimizing customer costs over time and maximizing benefits, consistent with the state's environmental goals and standards.

During 2007, the ECMB and electric Companies concentrated their efforts primarily on two sections of PA 07-242: the Integrated Resource Plan (IRP) (Section 51) and the Energy Efficiency Partners (EEP) Program (Section 94). In order to carry out the legislative mandates in the law, the ECMB has relied on its expert consultants, and increased the efforts of individual Board members, adding committees, which focus on programs in residential and commercial/industrial sectors.

TABLE A. STATUS OF ECMB RESPONSES TO THE ENERGY EFFICIENCY AND LOAD MANAGEMENT MANDATES ENACTED BY HOUSE BILL 7432:

Mandate	Section 3 requires the ECMB, in consultation with electric distribution companies (EDCs), to establish a residential window air conditioner ‘turn-in with a new purchase’ program, effective January 1, 2008 to September 1, 2008. <i>Status</i> The ECMB and its consultants worked with the companies to develop two programs, both included in the 2008 C&LM/CEEF Plan. To meet mandatory cost-effectiveness requirements with responsible environmental disposal for room air conditioners, rebates for some systems were reduced.
Mandate	Section 14 requires the ECMB, in consultation with EDCs and gas companies, to develop and estimate the cost of a comprehensive residential conservation program and report its findings to the General Assembly by February 1, 2008. <i>Status</i> The ECMB has established a Residential Energy Committee whose work will provide the basis for development of a residential conservation program meeting legislative requirements. The Home Energy Solutions program, already in operation, provides the basis. Other requirements are being developed and may draw from existing programs and discussions between the ECMB and the CT Clean Energy Fund on developing a joint High Performance Homes program.
Mandate	Section 51 requires the electric Companies to develop a resource procurement plan covering 3, 5 and 10-year time frames, which must satisfy resource needs first through “all available energy efficiency and demand reduction resources that are cost-effective, reliable, and feasible.” The goal of the plan is to meet projected requirements while minimizing costs to customers over time and maximizes consumer benefits consistent with the state’s environmental goals and standards. <i>Status</i> The ECMB consultants have worked extensively with the companies in developing a comprehensive procurement plan, and to ensure that resource needs are first met through available energy efficiency and demand reduction resources that are cost-effective, reliable and feasible. The ECMB plans to participate in the CEAB and DPUC review of the procurement plan.
Mandate	Section 52 requires the electric companies to implement demand side measures of the resource procurement plan “through the comprehensive (C&LM) plan” reviewed by the ECMB. The bill stipulates that all Company costs associated with the procurement plan will be recoverable in a manner determined by the DPUC. <i>Status</i> This will be accomplished after acceptance of the procurement plan(s).
Mandate	Section 84 mandates that the ECMB contract with an independent third party to assess Connecticut’s conservation and energy efficiency potential, including conservation, demand response and load management, and report to the General Assembly by February 1, 2008. <i>Status</i> A Request for Proposals to independent third parties has been issued and will proceed as rapidly as possible to complete the work.
Mandate	Section 87 requires the DPUC, in coordination with the ECMB, to establish a plan for a statewide energy efficiency and outreach marketing campaign by December 1, 2007 and begin implementation by March 1, 2008. <i>Status</i> The ECMB provided comments on the nature and timing of a campaign. The ECMB also participated in discussions with the DPUC and stakeholders. The ECMB is awaiting a draft decision by the DPUC. Marketing campaign will be launched in phases to avoid overextending resources of the C&LM programs until adequate funds are restored/ provided to adequately serve the ratepayers.
Mandate	Section 88 mandates that the DPUC, in consultation with the ECMB, develop a real-time energy report for daily use by television and other media by April 1, 2008. <i>Status</i> See section 87 status.

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In 2007, CEEF programs provided annual energy savings of approximately 355 million kWh.

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Since 2000, CEEF programs have saved Connecticut businesses and residents 31 billion kWh in lifetime electric savings.

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There were almost 500,000 instances of statewide participation in 2007 CEEF programs.

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Mandate Section 94 requires the ECMB to file an analysis by October 15, 2007 of the state's electric demand as well as recommendations for what qualifies as "enhanced demand-side management technologies" and how much to fund such measures.

Status The ECMB issued a Request for Information to Interested Parties; held a Public Input Session; filed its report on analysis of electric demand, peak electric demand, and the drivers of electric demand with the DPUC on October 22, 2007; and filed its "Observations and Recommendations" report regarding eligible technologies including a recommended project proposal review process for the EEP Program with the DPUC on December 14, 2007. On December 27, 2007, a technical meeting was held with the DPUC. Additional analysis of electricity costs (including FMCCs) is underway, to be completed in early 2008.

Mandate Section 97 requires the ECMB to issue a report on a "Connecticut energy excellence plan" that will be designed to, among other things, show how energy efficiency strengthens the state economy and how Connecticut can be positioned as a national leader in energy efficiency.

Status Energy Excellence Plan is under development. Preliminary discussions among the ECMB and its consultants have taken place. Portions of Plan will be based on activities and analyses underway in parallel, including the procurement plan (measures and approaches, state peak demand goals), the 2008 C&LM Plan, R&D, and educational resources.

Mandate Section 100 mandates that the DPUC, in consultation with the ECMB, develop a real-time energy email and cell phone alert system to notify the public of the need to reduce energy consumption during peak power periods.

Status See sections 87 and 88.

Mandate Section 105 requires that programs included in the Connecticut Energy Excellence Plan be screened through cost-effectiveness testing comparing the value and payback period of program benefits to program costs, to ensure programs are designed to obtain energy savings and system benefits. Cost-effectiveness testing must utilize available information obtained from real-time monitoring systems to ensure accurate validation and verification of energy use, and must include analysis of the effects of investments on increasing the state's load factor.

Status Peak demand reductions, which impact the state's load factor, are already estimated in the plans, included in the cost-effectiveness analysis, and reported in the ECMB annual reports. ECMB will report the impact on load factor in its future reports.

Mandate Section 115 provides for state fiscal year funding of natural gas C&LM programs from the gross receipts sales tax of all public service companies in excess of the revenue estimate approved by the General Assembly, limited to \$10 million, and placed in an ECMB account, to be dispersed by the ECMB to gas companies. All gas customers will be eligible to participate.

Status The ECMB is awaiting the tax reconciliation from year 2007 to determine if any additional funds will become available for the gas conservation programs.

Mandate Section 116 establishes a Fuel Oil Conservation Board (FOCB) and requires the administration of the oil conservation program to submit a fuel oil conservation plan to the ECMB by March 1, 2008 and October 1, 2008, and annually thereafter.

Status The ECMB is awaiting a March 1, 2008 submittal from the Fuel Oil Conservation Board. Due to delayed appointments for the FOCB, it appears unlikely that it will be able to timely submit a plan in March.

Mandate Section 125 requires the DPUC to conduct a contested case proceeding to examine the effectiveness of programs administered by the ECMB. The DPUC may modify or discontinue any of the conservation and load management programs based on the findings of the proceedings.

Status Examining the effectiveness and cost-effectiveness of the programs is an ongoing function of the annual C&LM plans and the Procurement Plan. Additionally, the ECMB can obtain program evaluations from independent contractors.

Energy Efficiency as a Resource: Forward Capacity Markets

The ISO-New England FCM, instituted during 2006, poses both an opportunity and a challenge for Connecticut's energy efficiency programs. Under the FCM plan, ISO-New England must create three-year forecasts of anticipated regional electrical capacity needs, defined exclusively as peak demand. This peak-demand capacity is then secured through an auction process, including both new generation and additional capacity derived from energy efficiency, load management and demand response. For the first time in the United States, reduction in demand through energy efficiency and demand response programs will be considered as electrical capacity equivalent to supply-side generation sources. Additional electrical capacity "produced" through the implementation of efficiency and load management measures becomes a resource, which can be bid to ISO on a level playing field with new generation. Thus, the FCM has become another potential source of funding for CEEF programs—this is the opportunity.

The FCM features a three-year transition period (December 2006-May 2010) where all eligible capacity, including other demand resources (ODR), will receive a pre-determined capacity amount. ODR includes customer-side generation such as combined heat and power plants, as well as energy storage, load management, or energy efficiency, installed on the customer's premises. Demand savings resulting from CEEF programs were enrolled into the FCM as ODR capacity, yielding \$2.5 million in revenues for additional program funding in 2007.

The challenge is adjusting to a process that requires multi-year forecasts for anticipated demand reduction through efficiency and load management. To allow adequate time for new capacity to come on line, the bidding process for that capacity will take place three years prior to the year in which it is delivered. In contrast to the FCM plan, the previous state-managed plans forecast peak capacity only 12 months ahead. Now, in the FCM, electrical efficiency and demand reduction resources are included as equals in the capacity market, but like other forms of new capacity, efficiency and demand reduction must be qualified and bid approximately three years in advance, with all the requisite financial assurances and performance requirements. In order for the CEEF and electric Companies to participate in the FCM and not lose all or part of their financial assurance, stable funding for the CEEF in future years is imperative.

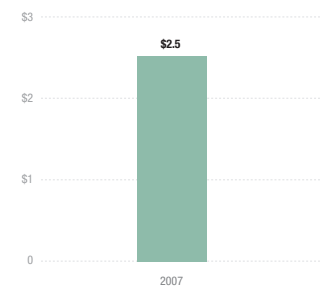
Potential for CEEF Programs Through Increased Funding

The emphasis on achieving efficiency goals—as reflected in Connecticut legislation, the Governor's Climate initiative, and the IRP—is important to the security of Connecticut's environment, public health, and economy. Pursuit of these farsighted goals will reduce consumer costs, yield public health and environmental benefits, and keep the state at the forefront of energy efficiency policy nationwide. The goals are achievable, but will require sustained investment in, and continued implementation and expansion of, the state's award-winning energy efficiency policies and programs.

Diversion of CEEF resources to the state's General Fund, which substantially reduced monies available for conservation and load management over the past four years, has limited the CEEF's ability to institute the types of efficiency programs that will allow Connecticut to achieve the farsighted goals articulated in policy. However, the legislation adopted in 2007 should provide the necessary funding for future years. PA 07-1, Sec. 134 provides funds to defease the remainder of the outstanding bonds, thus restoring the full three mills of funding. In addition, PA 07-242, Sec. 52 authorizes the DPUC to fund the demand-side measures approved through the procurement plans.

The FCM features a three-year Transition Period (December 2006-May 2010) where all eligible capacity will receive a predetermined capacity amount. The full FCM takes effect in June 2010 and features a declining clock auction for capacity.

Forward Capacity Market— Other Demand Resource Revenues (In Millions of Dollars)

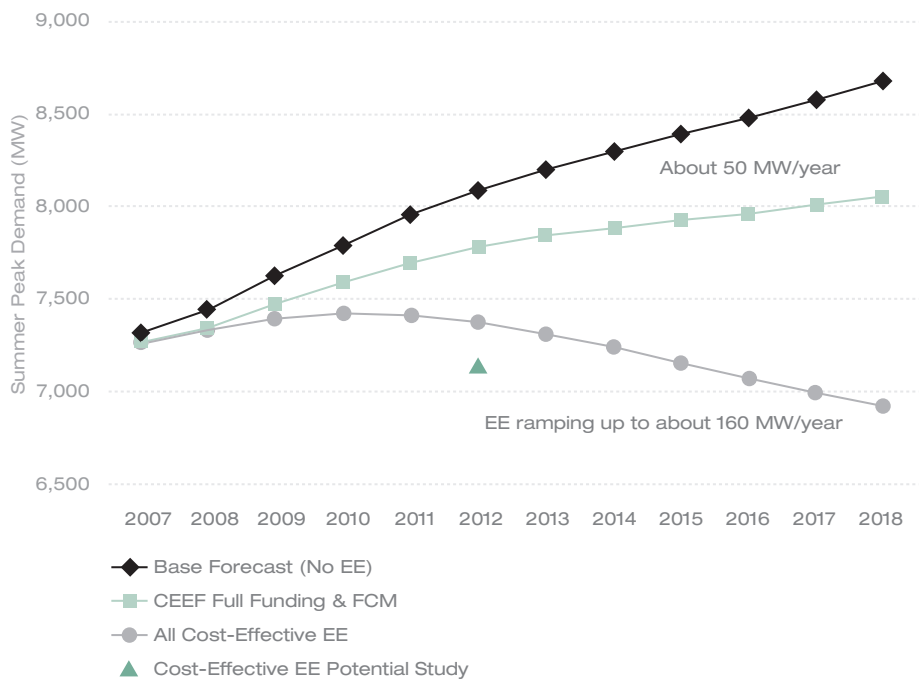


Investment of CEEF program savings into the FCM yielded \$2.5 million in revenues for additional program funding in 2007.

Planning scenarios developed by the ECMB consultants illustrate the level of substantial and sustained investment that will be required to capture all cost-effective energy efficiency, as directed in PA 07-242, and stabilize or eliminate growth in electrical demand. Instead of continuing the current upward trend in electrical demand, the goal for Connecticut is to “bend the line down” by decreasing electrical demand below current levels over the next ten years. As illustrated in Chart A (below), procurement of all cost-effective efficiency and load response can decrease electrical demand below current levels within 5 to 10 years.

Although there are significant energy savings opportunities, no single opportunity is a silver bullet. The best approach to attain the greatest savings will be a combination of programs as well as an increase in the efficiency requirements of state and federal codes and standards. The ECMB will continue to advocate for appropriate energy codes and standards in a variety of forums.

CHART A: ECMB 2008 ENERGY EFFICIENCY PLANNING SCENARIOS



The demand reductions from the ISO-NE Load Response programs and load management efforts are in addition to the demand reductions shown in the figure from energy efficiency programs.

Benefits of the CEEF

Connecticut's conservation and load management programs reduce energy consumption and increase peak demand savings, saving money for energy consumers and making more electrical capacity available throughout the state. The CEEF benefits Connecticut through persistent efforts to achieve the Fund's three primary objectives through conservation and load management programs. The three primary objectives of the CEEF are:

- 1) *Advancing the Efficient Use of Energy*
- 2) *Reducing Air Pollution and Other Negative Environmental Impacts*
- 3) *Promoting Economic Development and Energy Security/Affordability*

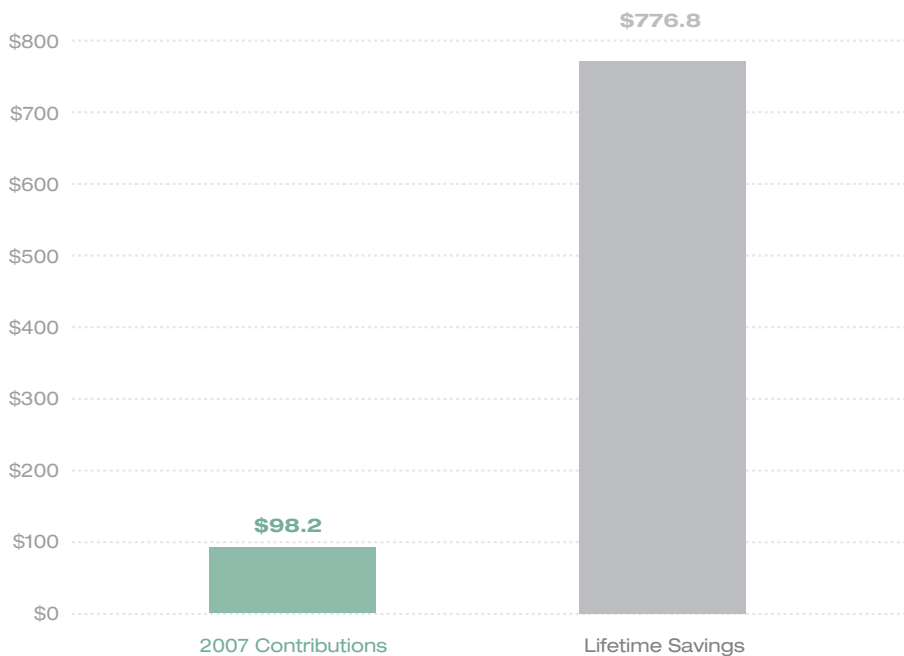
Advancing the Efficient Use of Energy

The CEEF programs target opportunities to save energy for residents and businesses through energy efficient design of new construction, high efficiency equipment upgrades (retrofit), replacement of high-use equipment, and optimizing operations and maintenance practices. The CEEF's general awareness campaigns and educational programs also help save energy indirectly by fostering an ethic of efficiency among energy consumers statewide. Widespread marketing and public education, used in tandem with improved efficiency technologies, are necessary to encourage the changes in energy use practices required to achieve Connecticut's energy policy goals.

The benefit of energy savings will accrue to Connecticut ratepayers over the lifetime of the measures installed through the CEEF programs implemented during 2007. As shown in Graph B, the lifetime savings resulting from CEEF 2007 programs is multiple times greater than the total contributions to the CEEF during that year.

GRAPH B: CONTRIBUTIONS AND DOLLARS SAVED

(In Millions of Dollars)



Energy Opportunities Case Study: Milford Schools

Milford Public Schools chose to be an early adopter of new lighting technology in their 15 schools, which serve 7,600 students. The schools were already using some efficient lighting technology (standard T8), but the Milford Board of Education decided to take advantage of new lighting technology and upgraded to enhanced premium T8 technology, including Super T8 fluorescent lamps with electronic ballasts; occupancy sensors; and compact fluorescent lamps. As a result, the schools reduced their electric lighting loads by 30 percent, a savings that would compensate for the total cost of the project in less than 30 months. "The decision to install new, more efficient lighting to save costs and reduce our environmental impact was very important to the Board," said Deputy Superintendent of Schools Philip Russell. "This was a large undertaking that involved two thirds the total square footage of the entire school system. It would not have been possible without funding from the Connecticut Energy Efficiency Fund."

The energy efficient lighting installed will reduce operating costs in Milford schools by \$154,848 annually. The school system leveraged \$356,501 in CEEF incentive funds through the Energy Opportunities program to install the new lighting technology. The annual 1,246,231 kWh in energy savings achieved is enough electricity to power 152 homes for a year. The associated environmental benefits are also substantial. By installing the new high-efficiency lighting technology, Milford schools reduced greenhouse gas by 745 tons, an amount equivalent to planting 185 acres of trees. One ton of SOx air pollutant emissions were also eliminated as a result of the new lighting installation. Both the cost savings and environmental benefits will continue to accrue for many years to the residents of Milford.

Energy Conscious Blueprint

Case Study:

Stop & Shop

Stop & Shop is committed to preserving the environment and has put in place many conservation initiatives. When the company began planning for its new store in Stamford, they wanted to build with energy efficiency in mind. From the start of construction, Stop & Shop worked with CL&P through the CEEF Energy Conscious Blueprint program, which enabled the company to include energy-efficiency measures as part of the initial design, when they are most cost-effective.

The new store boasts a high-efficiency lighting system with a photocell-controlled daylight dimming system that can dim or even shut off lights in response to available sunlight.

Their signs use a Light Emitting Diode (LED) system instead of traditional neon signage. LED signs use less energy and require less maintenance. High-efficiency HVAC equipment and premium-efficiency motors were also installed.

"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," says Paul Grenier, Corporate Energy Analyst for Stop & Shop. Stop & Shop leveraged a \$53,623 incentive from the CEEF to design and install efficiency measures into the new store that will yield lifetime savings of 3,595,000 kWh. Through the CEEF, Stop & Shop was able to lower operational costs and maximize its commitment to the environment. The greenhouse gas emissions reduction resulting from energy savings at the new, more efficient store is equivalent to taking 375 cars off the road or planting 533 acres of trees.

In 2007, CEEF programs resulted in annual energy savings of approximately 355 million kWh. Connecticut businesses and residents will benefit from 31 billion kWh in electric savings over the lifetime of the efficiency measures installed through CEEF programs administered by CL&P and UI during 2000-2007. At an average price of \$0.1801/kWh, this substantial reduction in energy consumption is equal to a savings of \$63.9 million annually and a lifetime savings of \$776.8 million for business and residences throughout Connecticut.

As shown in Table B, actual program results for 2007 exceeded projected performance due to a significant increase in customer demand. The DPUC approved additional budget dollars to meet this higher demand for programs. Savings projections for 2008 are lower because they were based on the budget levels established for the original base plan.

TABLE B: ENERGY-EFFICIENCY ACTIVITIES SAVE ENERGY AND MONEY FOR ALL CUSTOMERS

Energy Savings from Energy-Efficiency Programs* (In Millions of kWh)		
Type of Savings	2007 Actual	2008 Plan
Annual	355.4	249.9
Lifetime	4,313.5	2,963.8

*2007 actual results include additional funding approved by the DPUC. 2008 represents the October 2, 2007 C&LM filed Plan.

Estimated peak demand reduction in Connecticut was 450,492 kilowatts (kW) as a result of 2007 CEEF programs. Peak demand reduction helps ease the stress on Connecticut's transmission facilities and alleviates the potential risk of electricity shortages during high-use energy demand periods, such as unusually hot summer days.

Strengthening Reliability through Demand Response

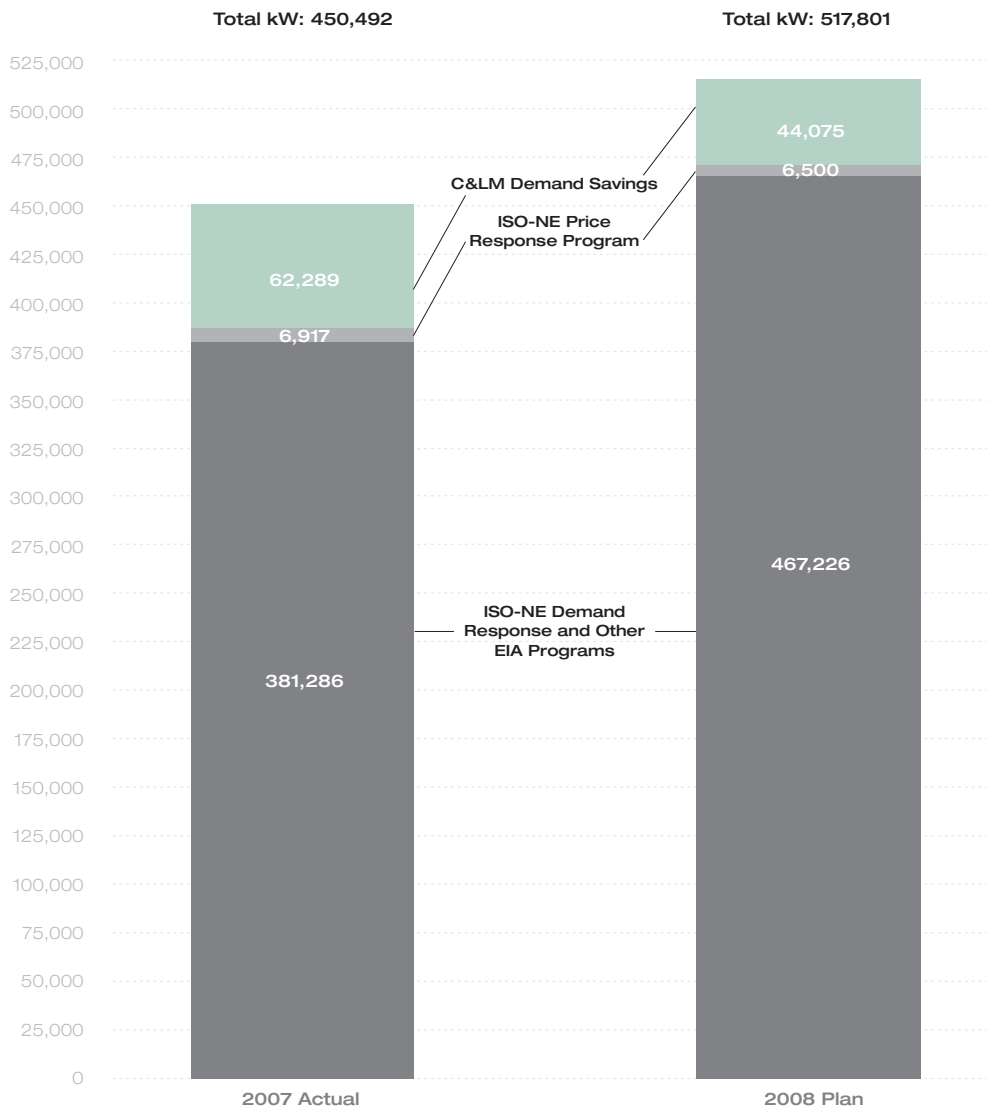
Reducing electrical demand has a positive ripple effect throughout Connecticut's power grid and its economy. Because electrical systems are generally sized to correspond with peak demand (plus reserve margin for forecasting uncertainty), lowering peak demand reduces overall plant and capital cost requirements. Lowering peak demand provides a broad range of benefits to customers by minimizing the cost of electricity over time, improving transmission reliability, and maximizing other benefits consistent with the state's environmental goals and standards. Through demand response programs more energy can be made available where it is needed. Lowering peak demand saves money for Connecticut ratepayers by reducing overall power plant and capital cost requirements and mitigating costs associated with FMCCs.

Chart C illustrates that the demand response programs are responsible for more than 380,000 kW of peak demand savings in Connecticut during 2007. In other words, these programs have made this additional electrical capacity available for use by homes and businesses in Connecticut without the need for new generation.

The majority of this savings is achieved through the ISO-NE Demand Response Program, as depicted by the dark grey segment of the bar chart below (Chart C). The uppermost segment represents the substantial peak demand savings realized through CEEF program efforts.

**CHART C. ADVANCING THE EFFICIENT USE OF ENERGY:
PEAK DEMAND SAVINGS AVAILABLE FROM CEEF AND EIA PROGRAMS**

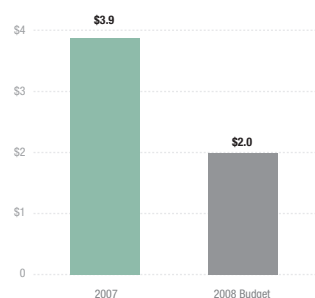
(In kW): 2007 actual savings and planned savings for 2008



Note: 2007 Actuals include 369 MW from EIA initiatives.

Public Act 05-01 (EIA) created a new Distributed Resources Portfolio Standard: Class III Renewables. The Companies are allowed to receive Class III Renewable Energy Credits (RECs) for Commercial and Industrial megawatt hour savings from CEEF funded projects. These RECs are sold by the Companies to energy suppliers or marketers interested in meeting their renewable portfolio standards (RPS). The sales from the RECs are returned to the CEEF for investment in more energy efficiency projects.

Class III Renewable Energy Certificate Revenues
(In Millions of Dollars)



Lower Costs: CEEF programs help ease stress placed on Connecticut's transmission lines by reducing energy use during peak demand periods. Decreased energy consumption during peak demand periods should help lower Connecticut consumers' electric bills through a reduction in FMCCs.

Enhanced Electric System Reliability: Transmission constraints and excessive peak energy demand diminish the overall reliability of Connecticut's electric systems. CEEF's energy-efficiency and load management programs are geared to help reduce load in transmission-constrained areas, providing greater reliability for Connecticut's residences and businesses. Reliability of electrical resources is critical to Connecticut's economy because operating digital controls, equipment and manufacturing processes requires electrical reliability of 99.999999%.

Reducing Air Pollution and Negative Environmental Impacts

A primary goal of CEEF is to reduce air pollution and improve air quality in Connecticut and the greater Northeast region. CEEF programs mitigate adverse environmental effects by reducing energy demand in Connecticut. Energy demand reductions mean fewer hours of operation for less-efficient power plants that are brought online to meet peak loads. Cutting back plant operation time reduces emissions of air pollutants, including sulfur and nitrogen oxides, and greenhouse gases.

Air pollutant reduction resulting from CEEF programs improves public health. Nitrogen oxides are precursors to ozone, a primary component of summer smog; in particulate forms, both nitrogen and sulfur oxides reduce visibility and are associated with respiratory problems, especially asthma. These air pollutants—also linked to acid rain and acid deposits in Connecticut's rivers and lakes—are named as two of the six "criteria pollutants" used by the EPA as indicators of air quality as defined by the national Clean Air Act.

By reducing the demand for power generation, CEEF programs lower emissions of GHG, such as carbon dioxide which is produced during electricity generation in fossil-fuel (e.g. natural gas, coal) combustion plants. In 2007, CEEF programs reduced carbon dioxide emissions by nearly 212,000 tons. GHG reduction goals are an increasingly important driver of Connecticut's environmental and energy efficiency policies.

In 2006, the Governor's Steering Committee on Climate Change released its Progress Report showing that in 2001 approximately 22 percent of Connecticut's annual state GHG emissions were the result of fossil fuel combustion for energy production; 40 percent of GHG emissions were attributed to transportation, 19 percent for residential heating and 19 percent for commercial and industrial purposes. The Climate Change Committee's Progress Report indicates that these sectors' GHG emissions can be reduced through increased efficiency standards for appliances, improved building efficiency codes (residential and commercial), and greening Connecticut's colleges and universities—all activities CEEF has worked to achieve.

In 2007, CEEF's C&LM program activities resulted in the following environmental benefits (calculated over the lifetime of the measures):

TABLE C: REFLECTING REDUCTION IN CLEAN AIR ACT "CRITERIA POLLUTANTS" AND CO₂

(In Tons)

	2007 Annual Actual	2007 Lifetime Actual	2008 Annual Plan	2008 Lifetime Plan
SO _x	336	4,076	236	2,801
NO _x	104	1,258	73	864
CO ₂	212,452	2,578,521	149,404	1,771,669

COLLABORATION FOR CLEAN ENERGY AND ENERGY EFFICIENCY

Energy efficiency and renewable energy are the “twin pillars” of sustainable energy policy. Sustained investments in both of these resources can reduce carbon dioxide emissions below current levels and simultaneously spur economic development in Connecticut. Toward this end, the EIA charges the ECMB to coordinate more of its efforts with the Connecticut Clean Energy Fund (CCEF), where there are synergies. Important examples of CEEF and CCEF program coordination are already in place.

The CCEF was created at the same time as the CEEF (Conn. Gen. Stat. §16-245n), and is charged with encouraging the development of clean energy technologies and the use of clean energy and renewable sources such as biomass, fuel cells, landfill gas, run-of-the-river hydropower, solar, wave/tidal/ocean thermal and wind. Since it is inadvisable to install expensive renewable energy generation equipment in a structure that is wasteful of available energy, the CCEF On-Site Renewable Demand Generation Program requires applicants to complete an “energy audit” to confirm that reasonable efficiency measures have first been installed. Direct participation in one or more of the C&LM programs offered by CL&P and UI within 36 months prior to submission of the CCEF incentive application also fulfills this requirement.

Promoting Economic Development and Energy Security/Affordability

PROMOTE ENERGY SAVINGS FOR ALL CONNECTICUT CUSTOMERS

In 2007, CEEF programs generated \$353 million in lifetime electric system benefits (**nearly four dollars in electric system benefits for each Fund dollar spent**) and saved enough energy to serve approximately 43,000 homes in Connecticut for an entire year. In 2007 alone, CEEF programs helped residents and businesses achieve energy savings of approximately 355 million kWh, resulting in long-term savings of approximately \$776.8 million over the lifetime of installed energy-efficiency measures.

BENEFITS DISTRIBUTED OVER ALL CUSTOMER CLASSES

The ECMB and the electric Companies work collaboratively to ensure that all Connecticut customers benefit from the CEEF’s energy-saving programs. Therefore, the CEEF’s budget is distributed across all customer classes. In 2007, there were almost 500,000 instances of participation in CEEF programs. Groups that benefited from 2007 programs include: educational institutions; non-profits; residential customers; small businesses; municipal and state governments; and large commercial and industrial customers.

TABLE D: SUMMARY OF ENERGY SAVINGS BY CUSTOMER CLASS

(In Millions of kWh)

Customer Sector	Annual Savings		Lifetime Savings	
	2007 Savings	2008 Plan	2007 Savings	2008 Plan
Low-Income	14.7	16.5	142.2	164.5
Residential (Non Low-Income)	105.2	81.6	840.4	712.2
Commercial & Industrial	235.6	151.9	3,330.9	2,087.0
Totals	355.4	249.9	4,313.5	2,963.8

Small Business Case Study: Creative Arts Workshop

Creative Arts Workshop (CAW) is a nonprofit regional center for education in the visual arts that has served the Greater New Haven Area since 1961. Located in the heart of the award-winning Audubon Arts District, the Workshop offers a wide range of classes in the visual arts in its own three-story building with fully equipped studios and an active schedule in its well-known Hilles Gallery. More than 3,000 adults and young people enroll annually in the over 300 courses offered, while thousands of visitors enjoy the exhibitions in the galleries throughout the year.

Through UI’s Small Business Energy Advantage conservation program and third party vendors, CAW realized that by upgrading old lighting to high-efficient lighting equipment and installing occupancy sensors to eliminate energy use in unoccupied areas, that they could reduce their overall energy consumption by more than 35 percent.

One of the highlights of the project was a redesign of the lighting in the galleries where lights run 12 hours a day. A more efficient display light was used which improved light levels, while reducing existing wattage by over 70 percent!

Completed early in 2007, the first year achieved a 46.2 percent reduction in energy use or 64,252 kilowatt-hours, saving them \$12,000. This equates to saving 10 acres of trees.

The Workshop received a \$15,452 CEEF incentive to help pay for the upgrade and qualified for zero percent financing for the balance making it a no up-front cost, no out-of-pocket project.

WRAP Case Study: Plainfield Resident

Weatherization programs such as the Weatherization Residential Assistance Partnership, also known as “WRAP”, help low-income customers manage their energy bills by making their homes more energy efficient. In 2007, CEEF weatherization programs helped almost 15,000 low-income customers save \$142 million lifetime kilowatt-hours, which equates to lifetime energy savings of \$27.5 million.

An energy specialist visited WRAP program participant Barbara Calluzzo of Plainfield to assess ways to minimize heat loss in the winter and maximize cooling effects in the warmer months. All her windows and doors were inspected for leaks, appliance efficiency was assessed, and finally water and lighting used was evaluated for potential to increase efficiency. After sitting down to talk with Barbara about efficiency tips and techniques, the energy specialist installed electric outlet gaskets, two low-flow faucet aerators, two door sweeps, door weatherstripping, CFLs, four energy efficient table lamps with CFLs, a window storm insulation kit, and a new refrigerator in her home.

“I worked all my life and now I’m almost 70 and I’m so grateful for the program,” she said. “Since the door sweeps have been put in and my new refrigerator doesn’t run all the time like the old one, my electricity bill has gone down. The door sweeps have kept the wind out and I no longer feel the draft on my feet. I absolutely think this is a worthwhile program. I’m an advocate!”

ENERGY EFFICIENCY FOR ECONOMIC DEVELOPMENT

Promoting economic development for all Connecticut businesses—large and small—is a primary goal of the CEEF. More than one-third of the energy generated in the United States is consumed by industry. With cost on the rise for energy, companies are looking to energy-efficiency programs and high-performance equipment to reduce the overhead costs associated with power for operations and maintenance. By participating in CEEF programs, Connecticut industrial manufacturers can cut their energy and improve their productivity, enabling them to maintain or improve their competitive niches in the global marketplace.

In 2007, CEEF programs continued assisting Connecticut industries in installing energy-efficiency measures to improve their productivity, product quality, safety and pollution prevention. This year, CEEF programs:

- Generated nearly \$4 dollars in electric system benefits for each Fund dollar spent.
- Paid or committed over \$10 million in incentives to approximately 1,754 Connecticut small businesses.
- Paid or committed over \$42.8 million in incentives to approximately 1,699 Connecticut commercial and industrial customers.
- Supported approximately 1,000 non-utility jobs in the energy-efficiency industry.
- Reduced operating costs and improved productivity in Connecticut’s commercial and manufacturing industries.
- Partnered with Connecticut retailers—small grocery stores and national home store chains—to promote ENERGY STAR appliances and lighting.

ASSISTANCE FOR LOW-INCOME CUSTOMERS

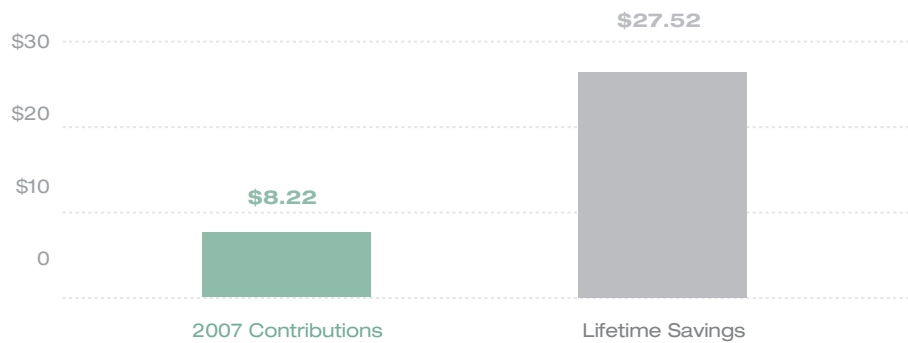
CEEF programs provide weatherization and education services to low-income customers to help reduce their energy bills. To assist with outreach to low-income customers, the gas Companies and the electric Companies maintain strong partnerships with local Community Action Agencies, third-party vendors and other Connecticut social service providers. These parties work closely together to educate low-income customers regarding available energy assistance, arrearage forgiveness programs, and other available billing programs. This type of education and partnership is important for low-income customers, as energy bills typically comprise a disproportionate percentage of their household income.

Weatherization programs are particularly important for low-income customers. Because weatherization involves some relatively simple changes—such as adding insulation, sealing cracks and weatherproofing doors and windows—that result in substantial energy savings and improved customer comfort and safety, it is the ‘low-hanging fruit’ of energy efficiency. More complicated measures, such as full air/duct sealing and HVAC system replacement are also important components of weatherization. Importantly, CEEF weatherization programs are “fuel blind,” meaning that they can be implemented without regard for the type of heat a customer uses.

The low-income energy efficiency programs of CL&P and UI help the state's most vulnerable customers save energy and money throughout the year, assisting approximately 14,882 low-income customers in 2007 and helping them save 142 million lifetime kWh, a lifetime energy savings of \$27.5 million. The CL&P Weatherization Residential Assistance (WRAP) and the UI Helps programs provide income-eligible customers with in-home visits by an energy specialist. Energy specialists assess the overall potential to improve weatherization throughout a customer's home and then install a range of measures—such as CFLs, caulking cracks and leaks, insulating doors and windows, and adding insulation to walls and attics—all designed to limit heat loss in the winter and keep a home cool in the summer. Energy specialists will also recommend other efficiency measures, including water conservation equipment, and determine if appliances and/or heating system are eligible for energy efficiency upgrades.

CHART D: 2007 LOW-INCOME CUSTOMER CONTRIBUTIONS VS. LIFETIME DOLLARS SAVED

(In Millions of Dollars)



SECTION V

CEEF Program Summary for 2007

Residential Programs

Programs	Eligibility	Incentive
ENERGY STAR® Retail Products	All residential customers.	Retail incentives, special events and mail order promotions to encourage customer buying habits of energy-efficient lighting products and clothes washers.
Residential New Construction	Residential customers in the process of building a new home.	Incentives for high-efficiency HVAC equipment, lighting products and home performance.
Residential Heating and Cooling	Residential customers with central air conditioning or heat pumps.	Prescriptive rebates for installing energy-efficient central air conditioning, heat pump and geothermal systems. Quality installation verification and commissioning available through participating contractors.
Home Energy Solutions	All residential customers with all electric, electric with gas heat, or high users with central air-conditioning. This program is free to all electric and natural gas heat customers. Co-pay for Connecticut residents who heat with oil.	Full comprehensive residential in-home services including: duct sealing, weatherization, energy efficient bulb installation, education, and water heating measures where applicable. Appliance rebates for replacing older, inefficient qualified appliances.
Weatherization Residential Assistance Partnership/ WRAP (CL&P), UI Helps (UI)	Low-income residents with incomes at or below 60% of the Connecticut state median income.	Full cost of installed conservation and energy-efficiency measures.
Energy Conservation Loan	All residential customers.	Low-interest loans for residential energy conservation work.
Community Based	Government, educational groups, economic development organizations, retailers, trade allies and civic organizations.	Education, CEEF program information and financial incentives are provided via an array of energy-efficiency programs.
eesmarts™	Boards of Education, school principals, teachers and parents.	Free Professional Development Workshops for Connecticut school teachers and school districts regarding eesmarts program and energy topics. Workshops and free curriculum for grades K-8 help students meet the Connecticut Mastery Test standards.
SmartLiving™ Center	All residential customers.	Free admission to center, free school tours, free meeting facilities and energy-efficiency information.
SmartLiving Museum Partnerships	All residential customers.	A collaboration with museums, science centers and other public venues to integrate the Fund's energy-efficiency message into workshops, activities and exhibits.

Call 1-877-WISE-USE or visit www.CTEnergyInfo.com for additional information.

Commercial & Industrial (C&I) Programs

Programs	Eligibility	Incentive
<p>Energy Conscious Blueprint</p> <p>Connecticut Cool Choice Rebate Form</p> <p>Connecticut MotorUp Express Rebate Form</p>	<p>New C&I construction, planned remodeling, major renovations and new equipment.</p> <p>Express Services Rebates for non-residential customers replacing rooftop or packaged air conditioning systems or heat pump systems.</p> <p>All non-residential customers, replacing three-phase motors.</p>	<p>Up to 100% of incremental cost.</p> <p>Rebates from \$70-200 per ton.</p> <p>Rebates based on average incremental cost.</p>
PRIME	Industrial manufacturing customers with average demand of 1,500 kW or less.	100% reimbursement of cost paid for the first two events at the customer's location for qualifying projects.
<p>Energy Opportunities</p> <p>Express Lighting Rebate Form</p>	All C&I customers, including municipalities, replacing inefficient lighting controls. Rebates exceeding \$1,000 require pre-approval.	<p>Up to 60% of installed cost (dependent upon energy-efficient measure) and possible two-year payback buy down (See Utility for details).</p> <p>Prescriptive rebates from \$10-\$55 per fixture or 100% of the incremental cost (varies with technology and application).</p>
Accelerated Chiller Retirement	All C&I customers with water-cooled chiller 25 years or older. Unit must operate during ISO summer peak hours. Any chiller that has an existing utility Conservation Program contract is not eligible.	Incentives are the lesser amount of: 75% of the total installed cost, 100% of the Utility Measure Cap, or \$600/ton installed cost.
Small Business Energy Advantage	All C&I customers, including municipalities, with up to 200 kW (CL&P) or 150 kW (UI) of average peak demand. Interest-free financing for up to 36 months available to qualified customers.	Prescriptive incentives for: Lighting and lighting controls up to 50% of installed cost; HVAC controls and tune-ups up to 50% of installed cost; and Refrigeration up to 50% of installed cost.
Operation & Maintenance (O&M) Services	All C&I customers. Program provides incentives for the implementation of non-capital intensive items that save electric energy.	Incentives up to 50% of installed cost (SWCT customers eligible for incentives up to 100% of installed cost).
RetroCommissioning	Large C&I customers must have a building energy management system with trending capability.	Incentives up to 50% of installed cost. (SWCT customers eligible for incentives up to 100% of installed cost.)
ISO-NE Load Response Program Support	Customers with at least 100 kW of curtable load that can respond within thirty minutes or two hours of notification.	Incentives paid for curtailment when requested. Higher payment available for customers capable of responding within 30 minutes.
*Demand Reduction	C&I customers who are capable and willing to control kW demand during peak times through real-time monitoring and control.	Qualifying projects incentives will be the lesser of \$500/kW curtailed or 50% of installed costs. (SWCT Customer—lesser of \$1,000/kW curtailed or 50% of installed cost).
*Small Industrial & Commercial Loan	Qualified commercial customers with average kW demand of 350 kW or less, or industrial customers with less than 100 employees. In business for minimum 3 years required.	Interest-free financing for qualified customers.

*Indicates CL&P Program only.

SECTION VI

2007-2008 CEEF Budget Summary

Conservation and Load Management Fund Programs	2007 Actual	2008 Plan
RESIDENTIAL		
Residential Retail Products	\$ 7,208,738	\$ 6,573,383
Appliance Retirement	277	2,302,000
Total—Consumer Products	\$ 7,209,015	\$ 8,875,383
Residential New Construction	1,567,028	1,657,283
Home Energy Solutions	6,546,782	10,650,473
Low Income WRAP/UI Helps	8,219,674	8,398,064
Subtotal RESIDENTIAL	\$ 23,542,499	\$ 29,581,203
COMMERCIAL & INDUSTRIAL		
C&I LOST OPPORTUNITY		
Energy Conscious Blueprint	\$ 18,135,582	\$ 13,241,563
Total—Lost Opportunity	\$ 18,135,582	\$ 13,241,563
C&I LARGE RETROFIT		
Energy Opportunities	28,771,626	18,642,328
O&M (RetroCx, BOC, RFP)	1,254,865	2,252,351
Total - C&I Large Retrofit	\$ 30,026,491	\$ 20,894,679
Small Business	12,046,775	9,470,612
Subtotal C&I	\$ 60,208,848	\$ 43,606,854
OTHER—EDUCATION*		
SmartLiving Center®—Museum Partnerships	\$ 419,717	\$ 434,246
K-8 Education	528,788	482,202
Community Based Program (SWCT)	212,041	—
Science Center	207,200	200,000
Subtotal Education	\$ 1,367,747	\$ 1,116,448
OTHER—PROGRAMS/REQUIREMENTS		
Institute for Sustainable Energy (ECSU)	\$ 295,823	\$ 285,000
C&LM Loan Defaults	64,900	94,700
Subtotal Programs/Requirements	\$ 360,723	\$ 379,700
OTHER—LOAD MANAGEMENT		
ISO Load Response Program Support	\$ 499,128	\$ 480,000
Demand Reduction	9,513	—
Power Factor	144,901	350,000
Water Heater Timer Promotion	100,000	—
Subtotal Load Management	\$ 657,648	\$ 930,000
OTHER—RD&D		
Research, Development & Demonstration	\$ 142,620	\$ 475,000
Subtotal RD&D	\$ 142,620	\$ 475,000
OTHER—ADMINISTRATIVE & PLANNING		
Administration	\$ 1,085,237	\$ 1,170,000
Planning and Evaluation	1,095,699	1,823,000
Information Technology	1,936,957	1,743,000
ECMB	475,542	590,000
Performance Management Fee	6,834,258	4,065,460
General Awareness	522,202	484,000
Admin/Planning Expenditures	\$ 11,949,896	\$ 9,875,460
PROGRAM SUB-TOTALS		
Residential	\$ 25,164,323	\$ 31,058,002
C&I	61,199,522	44,755,203
Other*	11,866,136	10,151,460
TOTAL C&LM BUDGET	\$ 98,229,981	\$ 85,964,665
Docket 05-07-14 PH01 EIA programs		
Load Curtailment	\$ 8,035,816	\$ 12,874,878
Residential HVAC	42,473	—
Electric & Gas Efficiency	58,385	7,900
Third Party Contracts (Load Curtailment & Emerg. Gen.)	13,924,892	12,208,339
General Awareness	296,900	315,000
Direct Load Control	43,720	1,700,000
Emergency Generation	6,610,040	8,188,677
Energy Opportunities	2,024,202	—
Subtotal Docket 05-07-14PH01 EIA Programs	\$ 31,036,427	\$ 35,294,794
Total C&LM and EIA Programs	\$ 129,266,408	\$ 121,259,459

* OTHER-EDUCATION is primarily allocated to residential programs. Totals Vary Due To Rounding.

Benefits of Connecticut's Energy-Efficiency Programs Far Exceed Costs

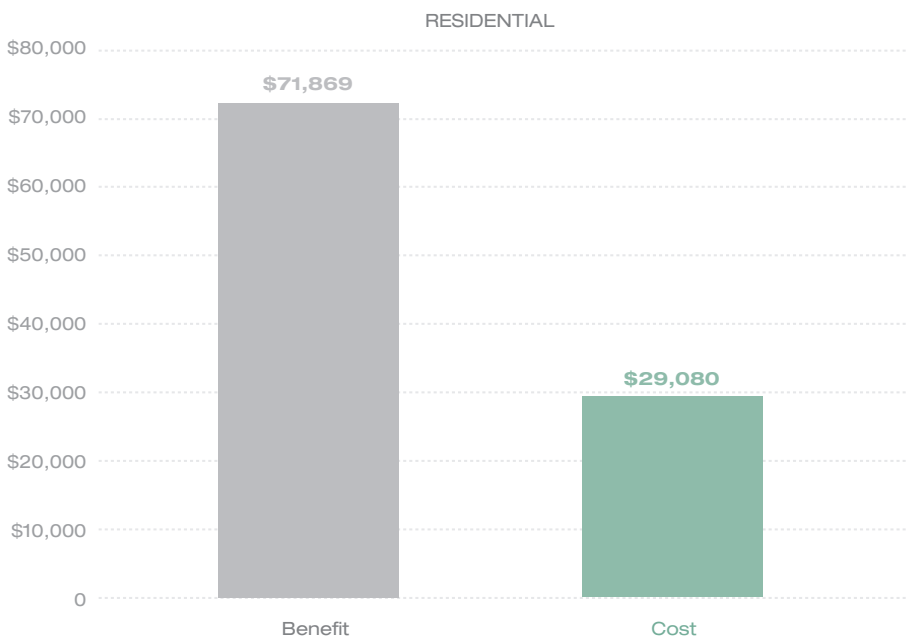
In order to provide the most cost-effective programs, the DPUC and ECMB advise and assist in CEEF operations and help to determine if they are effectively administered and implemented. The ECMB, CL&P and UI recognize that clear indicators, metrics of performance, and cost-benefit analyses are helpful and extremely important to ensure delivery of quality programs for Connecticut consumers. Each CEEF program is evaluated by performance and incentive metrics developed by the electric Companies, with input from the ECMB, the ECMB's consultants, and approved by the DPUC. Programs must meet or exceed expected metrics and have a high benefit-to-cost ratio, or they are discontinued.

COST-BENEFIT OF CEEF PROGRAMS

The benefits of CEEF programs, measured in dollar equivalents of lifetime energy savings, are several times greater than the cost of implementing CEEF programs. Both residential and commercial/industrial programs have strong benefit-to-cost ratios (Chart E).

CHART E: BENEFITS OF CONNECTICUT'S ENERGY-EFFICIENCY PROGRAMS FAR EXCEED COSTS

(In Thousands of Dollars)



(Continued on page 24)

Energy Conscious Blueprint

Case Study:

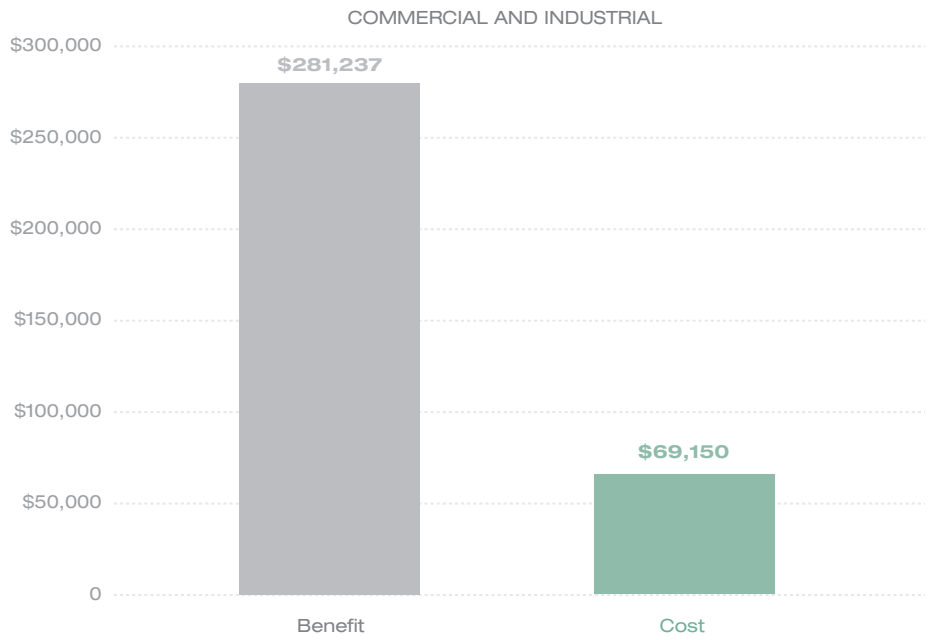
Chabaso Bakery

Chabaso Bakery is an American artisan bakery with long roots in New Haven. Chabaso evolved in 1994 from the Atticus Bookstore Café, which has been serving the city since 1976. In addition to fresh-baked bread, Chabaso produces 85 percent-baked loaves that are flash frozen right out of the oven in preparation for later in-store baking. The ethic of Chabaso Bakery and its founder extends from a commitment to providing premium quality baked products using all natural ingredients to a sense of environmental responsibility, which includes putting a high priority on energy efficiency. Chabaso's flash freezing system, among other things, presented an opportunity for substantial energy efficiency improvements and savings.

As Chabaso Bakery planned new construction to expand their New Haven facility, they consulted with UI. UI was able to offer Chabaso Bakery \$81,000 from the Connecticut Energy Efficiency Fund for participating in UI's Energy Conscious Blueprint Program. Chabaso qualified for \$77,400 in CEEF incentive dollars for installation of a new energy efficient refrigeration system for product freezing, which has variable load capabilities to maximize efficiency at different temperature conditions. The system is projected to save about 118,000 kWh per year more than the alternative design for a system that would have been less expensive to install, but less energy efficient. Chabaso also leveraged \$3,600 in CEEF incentive dollars to include "T8" fluorescent interior lighting as part of their building expansion plan. T8 lighting exceeds CT building code requirements, resulting in an additional savings of 14,000 kWh.

CHART E: BENEFITS OF CONNECTICUT'S ENERGY-EFFICIENCY PROGRAMS FAR EXCEED COSTS

(In Thousands of Dollars)

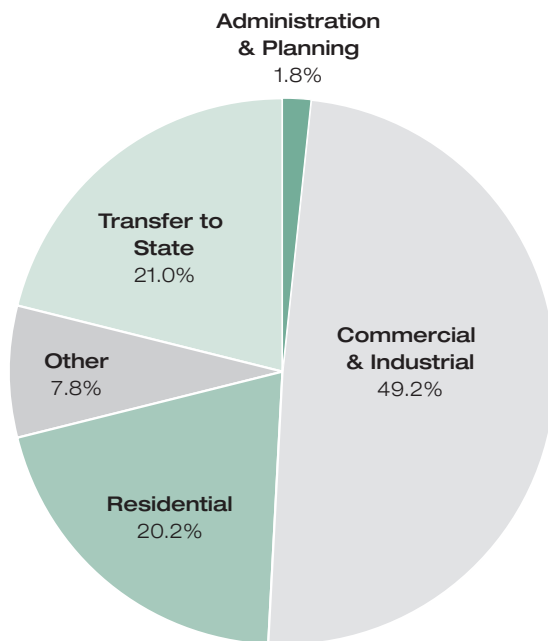


CEEF Budget Allocations

In 2007, CEEF programs were operated on reduced funding because CEEF continues to cover securitization bonds relating to the diversion of ratepayer conservation funds to the state's General Fund in 2004. Although in 2007 the state legislature provided funding to cover the costs of these securitization bonds, these funds have not yet resulted in relieving CEEF of its obligations. The ECMB anticipates that CEEF will be relieved of repayment obligations at some point in 2008, freeing funds collected from utility ratepayers to relieve some of the resource constraints it currently operates under.

CEEF programs are administered to maximize the cost effectiveness and impacts of C&LM activities. Among northeast states, CL&P and UI rank favorably in terms of program administrator cost per kilowatt hour saved, according to the Connecticut Electric Conservation Programs Study recently prepared for the Connecticut Energy Advisory Board (CEAB). Only 1.8 percent of the total CEEF budget was allocated to administrative expenses in 2007 (See Chart F, below).

CHART F: 2007 ACTUALS: CEEF BUDGET ALLOCATIONS



2007 "Transfer to State" includes funds diverted to the State's General Fund under PA 03-02 and funds used for rate reduction bonds under PA 03-6 and authorized by the DPUC in docket 03-09-08.

Energy Opportunities and Small Business Energy Advantage Case Study: Wilton Schools

The Wilton Board of Education invested a portion of its capital budget on projects designed to lower operating costs through energy efficiency. The Board chose to invest in high-efficiency lighting upgrades because of the dramatic energy savings that could be achieved in Wilton's schools. Instead of the usual old-style fluorescent, metal halide and incandescent lighting fixtures, Wilton schools now feature energy-efficient high-performance fluorescent lights with electronic ballasts. The new lights reduce energy costs by producing more light using less energy. Areas that were previously dim are now well lit. Through the Energy Opportunities and Small Business Energy Advantage programs, these schools leveraged nearly \$192,000 in CEEF incentive dollars to upgrade the lighting system and generate a total lifetime savings of 10.5 million kWh.

"That's the equivalent energy savings of taking over 1,000 cars off the road or providing 1,284 homes with electricity over the lifetime of the light's use," said CL&P's Conservation & Load Management Manager Ron Araujo. "The environmental benefits are tremendous and immediate." The new high-efficiency lighting will result in annual energy savings of approximately \$88,000 and a total savings of more than \$1.27 million over the lifetime of the measures. The new lighting also reduced the peak demand for the five schools by almost 160 kilowatts. Reducing peak demand means the schools use less electricity during high-use periods and there is less stress on the region's energy supply.

"The CEEF incentive covered about 57 percent of the project's total cost. The balance was financed through a zero-percent, two-year loan from CL&P," said Kenneth Post, director of Financial Planning & Operations, Wilton Public Schools. "The monthly loan payments are less than the anticipated monthly electricity savings. Since the school district would not be 'out-of-pocket' any money, and with a payback after only two years, it was a pretty easy decision to go ahead with this project."

Natural Gas Distribution Company Programs

Creation of the Natural Gas Energy Efficiency Programs

- 2005 EIA summary vis-à-vis gas energy efficiency plans
- ECMB role
- Summary of 2007 gas energy efficiency performance

In 2005, the legislature added the natural gas distribution companies—Connecticut Natural Gas Corporation (CNG), Southern Connecticut Gas Company (SCG), and the Yankee Gas Services Company (Yankee Gas)—to the ECMB’s membership and tasked the ECMB with advising and assisting them in the development and implementation of gas energy-efficiency plans to implement cost-effective energy efficiency programs and market transformation initiatives. Since 2005, Connecticut’s natural gas energy efficiency programs have been seamlessly integrated with electrical C&LM programs. The resulting programs, such as the Home Energy Solutions program (formerly known as the General Weatherization program), take a holistic approach to residential energy efficiency intended to help customers achieve reductions in both gas and electrical consumption throughout the home.

RESIDENTIAL LOW-INCOME WEATHERIZATION AND HEATING SYSTEM REPLACEMENT PROGRAM

The Low-Income Weatherization Residential Assistance Partnership with Heating System Replacement program (WRAP-HS) reduces the utility bills of eligible low-income customers and makes their residences more energy efficient and comfortable by installing weatherization measures, replacing older, inefficient heating and water heating systems and performing energy conservation services, at no cost to the participant. The program also provides energy efficiency education to raise customer awareness of conservation and to encourage them to take behavioral and other steps beyond weatherization to further reduce energy consumption. Residential customers (owners and renters) who pay their own natural gas or electric accounts and whose household income is less than 60 percent of the state median income are eligible to receive the program’s services. This program is a continuation of 2006 activities.

HOME ENERGY SOLUTIONS PROGRAM

Beginning in 2006, the natural gas Companies worked collaboratively with the ECMB and its consultants to update existing programs and to develop new programs. The electric Companies and the gas Companies also began to work more closely to ensure seamless coordination of energy conservation efforts. As a result, the Home Energy Solutions program was introduced. The program is a joint effort of the State’s investor-owned natural gas and electric utilities and is available to all of the Companies’ residential customers.

The Home Energy Solutions program reduces utility bills so that they are more affordable for residential customers who have household incomes higher than the “low-income” program guidelines, yet still experience a financial impact because their homes are not energy efficient. This program provides free comprehensive weatherization and other energy conservation services to owner-occupied dwellings who pay for their own natural gas accounts, and provides a subsidized charge for households that heat with deliverable fuel. This program is a continuation of 2006 activities.

COMMERCIAL AND INDUSTRIAL PROCESS RETROFIT PILOT

The Process Retrofit Pilot is a market based request for proposal program designed to promote competitive gas energy-efficiency activities in the market place by encouraging customers and/or third parties to bid to undertake gas efficiency projects on a competitive basis. The Process Retrofit Pilot program, newly created in 2007, is focused on energy-efficiency potential from commercial and industrial (C&I) customers utilizing process applications that consume natural gas resources (e.g., manufacturing, food service, laundry services, etc.). It provides business customers with the flexibility to identify both site-specific conservation enhancements and funding requirements. The program is currently offered as a pilot designed to test and establish market interest and potential. The knowledge and insight gained will guide a longer-term strategy, development of future program designs, and more effective strategies to meet customer needs.

In 2007, the natural gas Companies' energy-efficiency programs served approximately 5,083 customers. The Home Energy Solutions program served 2,769 natural gas customers with comprehensive weatherization services, such as duct sealing. These customers will realize annual gas savings of 175,381 ccf and lifetime gas savings of 2.74 million ccf. The Low-Income WRAP-HS program delivered weatherization services to 2,314 low-income customers in Connecticut. The newly introduced Commercial and Industrial Process Retrofit Pilot program attracted nine project opportunities. These are currently in various stages of review or completion.

See Table E: Energy Spending/Savings from Natural Gas Utilities' Energy-Efficiency Programs on page 28.

TABLE E: ENERGY SPENDING/SAVINGS FROM NATURAL GAS COMPANIES' ENERGY-EFFICIENCY PROGRAMS

Natural Gas Conservation Expenditures		
Program	2007 Actual	2008 Plan
Residential		
Low Income Weatherization	\$ 1,307,554	\$ 1,150,000
Home Energy Solutions (General Weatherization)	1,177,449	1,480,000
Water Heating	NA	363,000
Subtotal Residential	2,485,003	2,993,000
C&I Programs		
C&I	31,542	3,419,503
Subtotal C&I	31,542	3,419,503
Other (Loans, Admin, Planning and ECMB)		
CHIF Loan, Admin/Planning and ECMB	134,251	377,000
Subtotal Admin/Planing	134,251	377,000
Total	\$ 2,650,796	\$ 6,789,503
Energy Savings and Customers Served		
Program	2007 Actual	2008 Plan
Low Income Weatherization		
Annual ccf	253,099	208,695
Lifetime ccf	3,333,506	2,713,031
Customers served	2,314	3,424
Home Energy Solutions (General Weatherization)		
Annual ccf	175,381	206,823
Lifetime ccf	2,740,112	3,722,815
Customers served	2,769	3,795
Water Heating		
Annual ccf	NA	45,594
Lifetime ccf	NA	911,875
Customers served	NA	750
Total Weatherization and Water Heating Savings		
Annual ccf	410,480	461,111
Lifetime ccf	6,073,618	7,347,721
Customers served	5,083	7,969

Connecticut Municipal Electric Energy Cooperative (CMEEEC)

CMEEEC is a publicly directed joint action supply agency formed in 1976 by the state’s municipal electric utilities. Its mission is to meet the electric needs of its residents and businesses at the lowest possible cost. CMEEEC is owned by the Cities of Groton and Norwich, the Borough of Jewett City, and South and East Norwalk. CMEEEC also provides all power required by other participating utilities including the Town of Wallingford Department of Public Utilities, the Bozrah Light and Power Company, and the Mohegan Tribal Utility Authority.

In 2006 CMEEEC began implementation of a portfolio of energy-efficiency initiatives, directed to all customer segments. During the 2006 start-up year, the CMEEEC Systems emphasized compact fluorescent lamps (CFL) distribution, ENERGY STAR appliances, low income weatherization and major commercial lighting projects.

CMEEEC’s efforts for 2007 involved a marked increase in the program measures initiated during 2006 as well as a substantial increase in program components. This year, CMEEEC energy-efficiency programs generated 4.2 MW in summer demand reduction and over 14,573,000 kWh in annual energy savings, at a cost of \$0.016 per lifetime kWh. CMEEEC’s commercial and industrial customers received over \$700 thousand in incentives for installing energy-efficiency measures in their facilities. The CMEEEC programs overall resulted in \$2 million in customer savings.

The CMEEEC Systems endorse the CEEF’s primary objectives of advancing the efficient use of energy, reducing air pollution and negative environmental impacts, and promoting economic development and energy security and affordability. The CMEEEC program provides positive steps toward these goals for the Connecticut cities and towns served by municipal electric systems.

The CMEEEC program has two underlying elements which are the defining characteristics of the municipal systems. These are 1) flexibility of measures to meet specific customer needs and 2) direct local communication and contact with customers. In all of their operations, the municipal systems provide flexibility based on customer need and circumstances. The most distinguishing characteristic, however, involves customer communication—how the CMEEEC systems engage customers in dialogue. Since mass communication methods are not effective for the municipals due to their confined areas of service, direct contact with individual customers has always been preferred. The CMEEEC systems continue to use this most effective method to promote energy efficiency in their communities. The Systems use direct phone calling and mail, websites, message-on-hold information, and lobby displays to get the efficiency message out to customers. Direct contact methods involve site visits to larger customers and personal delivery and direct install efforts for residential and smaller commercial customers. Also, municipal customer service centers are prime locations for the distribution of CFL’s and efficiency information. Since these centers are local, they receive walk-in visits from a significant percentage of customers each month.

Table F lists the expenditures for efficiency programs for the Municipal Electric Systems. For reference, The Borough of Jewett City Department of Public Utilities serves part of the Town of Griswold. South Norwalk Electric and Water and Norwalk Third Taxing District serve sections of the City of Norwalk.

**TABLE F:
ASSISTANCE TO CUSTOMERS IN THE CMEEEC SYSTEMS SERVICE AREAS**

Bozrah Light and Power	\$	15,000
Groton Utilities	\$	610,000
Jewett City Department of Public Utilities	\$	40,000
South Norwalk Electric and Water	\$	65,000
Norwalk Third Taxing District	\$	174,000
Norwich Public Utilities	\$	480,000
Wallingford Electric Division	\$	866,000

CMEEEC generated 4.2 MW in summer peak reduction and over 14,573,000 kWh in annual energy savings, at a cost of approximately 1.6 cents per lifetime kWh in 2007.

In 2007, CMEEEC distributed over 180,000 CFL’s to residential and small commercial customers, over 22,000 CFL’s to through delivery and direct install programs.

Direct install efforts resulted in an average installation of 28 bulbs per household with installations ranging to as many as 128 bulbs.

CMEEEC’s 2007 commercial and industrial programs completed projects totaling over \$2.1 million including customer incentives of over \$700,000.

All CMEEEC Systems offered green power to their customs in 2007.

The CMEEC program elements offered to customers during 2007 are outlined in Table G. Table H provides the data detailing the program costs and resulting energy savings.

TABLE G: 2007 PROGRAMS

RESIDENTIAL CUSTOMER PROGRAMS 2007
General weatherization for residential customers
Low income weatherization
CFL distribution at customer service centers and through other community programs
CFL direct install programs for residential customers
CFL school fundraiser for the benefit of school Parent Teacher Organizations
Cool choice rebate program was extended to residential customers
Lighting catalogue sales were available for customers and the CMEEC systems participated in area lighting shows
ENERGY STAR appliance rebates for clothes washers, dish washers, refrigerators and water heaters
COMMERCIAL AND INDUSTRIAL CUSTOMER PROGRAMS 2007
Programs were offered on both a prescriptive and a custom basis. Where appropriate prescriptive program offerings were included in custom projects.
Motor Up rebates
Cool Choice rebates
CFL direct install and distribution programs were available for small commercial customers
Custom lighting and HVAC
Custom new construction
Retrofit lighting for schools and other public buildings
RENEWABLE ENERGY PROGRAM 2007
Green Power offer was initiated
Renewable energy generation incentives were offered

TABLE H: 2007 CMEEC COSTS AND RESULTS

Program	Program Budget 2007	Actual Utility Costs 2007	% of Budget Spent	Proj. Annual Savings (MWh)	Annual Savings (MWh)	% of Annual MWh Saved	Lifetime Savings (MWh)	Proj. kW Impact (Year End)	kW Impact (YTD)	% of kW Impact Achieved
Residential										
Low Income Program	\$ 155,716	\$ 56,061	36%	221	94	42%	655	9	7.4	82%
Existing Home Retrofit	\$ 87,690	\$ 52,982	60%	159	110	69%	924	6	6.5	109%
Efficient Products										
Lighting	\$ 384,873	\$ 708,534	184%	2,568	5,349	208%	37,445	26	258.1	993%
Appliances	\$ 148,894	\$ 62,726	42%	244	97	40%	1,156	57	6.6	12%
Subtotal—Residential	\$ 777,173	\$ 880,303	113%	3,192	5,650	177%	40,180	98	278.6	284%
Commercial										
Commercial New Construction	\$ 41,411	\$ 0	0%	192	0	0%	0	40	0.0	0%
Commercial Equipment Replacement										
Prescriptive	\$ 196,703	\$ 160,327	82%	863	562	65%	12,975	161	70.2	44%
Custom	\$ 46,587	\$ 12,017	26%	232	356	153%	3,242	31	71.9	232%
C&I Existing Facility Retrofit	\$ 1,138,812	\$ 1,199,848	105%	6,218	8,006	129%	85,824	832	1,306.3	157%
Demand Response									2,500.0	
Subtotal—Commercial	\$ 1,423,513	\$ 1,372,192	96%	7,505	8,924	119%	102,041	1,064	3,948.4	371%
Total—All Programs	\$ 2,200,686	\$ 2,252,495	102%	10,697	14,574	136%	142,221	1,162	4,227.0	364%

SECTION IX: Incentive Allocations

Assistance to Customers in Connecticut Towns*

This list includes residential, commercial and industrial customers for CEEF, gas Companies and CMEEC towns.

Andover	\$	13,429	East Lyme	\$	177,069
Ansonia	\$	281,828	East Windsor	\$	405,568
Ashford	\$	32,616	Eastford	\$	59,945
Avon	\$	849,370	Easton	\$	38,815
Barkhamsted	\$	75,260	Ellington	\$	286,741
Beacon Falls	\$	97,892	Enfield	\$	916,760
Berlin	\$	884,690	Essex	\$	163,400
Bethany	\$	17,184	Fairfield	\$	803,989
Bethel	\$	400,487	Farmington	\$	818,454
Bethlehem	\$	30,713	Franklin	\$	34,781
Bloomfield	\$	690,942	Glastonbury	\$	673,470
Bolton	\$	48,881	Goshen	\$	21,838
Bozrah	\$	15,146	Granby	\$	86,081
Branford	\$	390,076	Greenwich	\$	430,002
Bridgeport	\$	1,878,734	Griswold	\$	59,267
Bridgewater	\$	4,215	Groton	\$	672,356
Bristol	\$	1,583,211	Guilford	\$	155,395
Brookfield	\$	477,611	Haddam	\$	35,888
Brooklyn	\$	106,355	Hamden	\$	751,820
Burlington	\$	125,980	Hampton	\$	13,667
Canaan	\$	36,510	Hartford	\$	3,669,075
Canterbury	\$	18,248	Hartland	\$	8,690
Canton	\$	127,016	Harwinton	\$	27,858
Chaplin	\$	15,034	Hebron	\$	34,152
Cheshire	\$	618,385	Kent	\$	12,981
Chester	\$	32,218	Killingly	\$	326,219
Clinton	\$	60,250	Killingworth	\$	16,363
Colchester	\$	138,180	Lebanon	\$	13,181
Colebrook	\$	1,503	Ledyard	\$	130,373
Columbia	\$	23,945	Lisbon	\$	68,650
Cornwall	\$	7,684	Litchfield	\$	64,946
Coventry	\$	79,468	Lyme	\$	17,284
Cromwell	\$	228,767	Madison	\$	163,509
Danbury	\$	2,459,951	Manchester	\$	1,269,691
Darien	\$	103,732	Mansfield	\$	186,755
Deep River	\$	197,635	Marlborough	\$	58,695
Derby	\$	175,666	Meriden	\$	1,075,784
Durham	\$	57,706	Middlebury	\$	35,454
East Granby	\$	240,142	Middlefield	\$	75,716
East Haddam	\$	67,453	Middletown	\$	1,039,562
East Hampton	\$	80,440	Milford	\$	2,364,498
East Hartford	\$	1,502,465	Monroe	\$	206,699
East Haven	\$	232,783	Montville	\$	450,190

Morris	\$	18,129	South Windsor	\$	755,610
Naugatuck	\$	371,112	Southbury	\$	446,898
New Britain	\$	1,985,814	Southington	\$	1,154,767
New Canaan	\$	118,127	Sprague	\$	30,032
New Fairfield	\$	38,449	Stafford	\$	78,648
New Hartford	\$	220,841	Stamford	\$	2,160,046
New Haven	\$	2,328,911	Sterling	\$	107,253
New London	\$	546,382	Stonington	\$	278,512
New Milford	\$	545,550	Stratford	\$	1,221,686
Newington	\$	1,501,975	Suffield	\$	142,594
Newtown	\$	330,854	Thomaston	\$	81,980
Norfolk	\$	48,227	Thompson	\$	83,464
North Branford	\$	221,301	Tolland	\$	58,015
North Canaan	\$	51,045	Torrington	\$	959,803
North Haven	\$	1,306,813	Trumbull	\$	283,791
North Stonington	\$	34,894	Union	\$	29,828
Norwalk	\$	2,509,485	Vernon	\$	335,540
Norwich	\$	495,251	Voluntown	\$	11,841
Old Lyme	\$	55,834	Wallingford	\$	956,570
Old Saybrook	\$	270,929	Warren	\$	7,874
Orange	\$	622,559	Washington	\$	16,451
Oxford	\$	234,770	Waterbury	\$	2,392,546
Plainfield	\$	676,135	Waterford	\$	447,724
Plainville	\$	376,228	Watertown	\$	351,091
Plymouth	\$	149,637	West Hartford	\$	1,166,422
Pomfret	\$	170,350	West Haven	\$	789,850
Portland	\$	124,611	Westbrook	\$	233,816
Preston	\$	59,051	Weston	\$	32,219
Prospect	\$	29,409	Westport	\$	1,010,266
Putnam	\$	449,501	Wethersfield	\$	214,420
Redding	\$	122,090	Willington	\$	50,577
Ridgefield	\$	680,811	Wilton	\$	472,750
Rocky Hill	\$	655,329	Winchester	\$	288,464
Roxbury	\$	11,669	Windham	\$	803,342
Salem	\$	25,584	Windsor	\$	2,070,719
Salisbury	\$	46,023	Windsor Locks	\$	581,822
Scotland	\$	5,302	Wolcott	\$	118,333
Seymour	\$	89,444	Woodbridge	\$	184,220
Sharon	\$	70,499	Woodbury	\$	91,884
Shelton	\$	2,073,747	Woodstock	\$	41,122
Sherman	\$	2,180			
Simsbury	\$	470,960			
Somers	\$	49,370			

*Based on 2007 data. All figures are approximated and may vary due to rounding.

*This does not include incentives for ISO-NE Load Response program participants.

Sample List of Commercial and Industrial Customers Served by CEEF

3,453 commercial and industrial customers participated in CEEF programs in 2007

- A & P Tea Company
- A B F Freight
- A S A P Bedliners
- A-Design & Home Improvement, LLC
- Ahlstrom
- Albertus Magnus College
- Alinabal, Inc.
- Amodio Moving, Inc.
- Aquarion Water
- Associated Spring
- AT&T
- Atlantic CS&W, LLC
- Avon Old Farms
- Barden Corporation
- Bed Bath & Beyond
- Beers Guidance Clinic
- Best Buy Stores, LP
- Bic Corporation
- Big Lots
- Big Y Foods, Inc.
- Birge & Company R B
- Boehringer Ingelheim
- Bombardier Aircraft
- Bourdon Forge Company
- Bristol Business Center
- C&S Wholesale Power Factor
- Cabela's
- Calvin Leete Elementary School
- Canton Racing Products
- Cardinal Sheehan Center
- Carla's Pasta
- Carlton Industries
- The Caron Collection
- Cedar Hill Apartments, LP
- Celco Heating & AC
- City of Stamford
- Colt Defense, LLC
- The Connecticut Institute for the Blind/Oak Hill
- Corbin Russwin, Inc.
- CRC Development, LLC
- Danbury Fair Mall
- Debry Mart, LLC
- Dichello Distributors
- Dow Chemical
- ECSU Student Center
- Edwin Gaynor Corporation
- Empire Paving Company, Inc.
- Engineering Specialties, Inc.
- Enthone, Inc.
- Ethan Allen Service Center
- Fagan Design
- Fairfield Avenue Parking Corporation
- FCI Burndy
- FedEx
- Ferrucci's Italian Deli
- Fairfield Avenue Parking Corporation
- Firestone Warehouse
- Flexo Converters
- Fuel Cell Energy, Danbury
- Gateway Center Association, Inc.
- General Electric Corporate Offices
- Glastonbury High School
- Goodrich
- Habilis, Inc.
- Harbor Plaza Associates
- Hartford Public High School
- Highland Realty Partners
- Home Depot
- Homegoods TJX
- Homewood Suites
- Howell Cheney Regional Vocational Technical School
- Hubbell, Inc.
- Huttig Building Supply
- IBM—Southbury Data Center
- ING Insurance
- International Paper
- Iron Mountain
- ITW Highland Manufacturing Company
- Jerusalem Foods, Inc.
- Jo-Ann Fabrics
- Keeney Manufacturing
- King Koil Mattress
- Lacey Manufacturing Company
- Lake Compounce
- Lillian August Designs, Inc., Norwalk
- Lorad
- Louis Dreyfus Parking Garage
- Lowe's Distribution Center
- MBI Incorporated

- Manchester High School
- Meadow Ridge—Continuing Care
- Mead Westvaco Corporation
- Medical Instill Technologies
- Meriden, City of
- Metal Improvement Company/Curtis-Wright Corporation
- Metropolitan District Commission (MDC), Hartford
- Milford Bank
- Millennium Trust, LLC
- Morgan Street Garage
- Mount Sinai Hospital
- MTU Aero Engines
- National Graphic Company
- National Lumber, Inc.
- Naugatuck Glass
- Nayaug Elementary School
- New Canaan High School
- New England Stone, Inc.
- North Branford, Town of
- Norwalk Hospital
- Nyala Farms
- Outland Engineering, Inc.
- Pasquariello Electric
- Pennant Foods Company
- Perkins Chevrolet, Inc.
- Perry Technologies
- Pitney Bowes, Inc.
- Pratt & Whitney
- Putnam Precision Molding, Inc.
- Quadrelle
- Quinnipiac University
- Rand Whitney
- Raymour & Flanigan
- RBC Bearing
- Reckson Associates Realty
- Rex Forge
- Rockbestos
- Rotondo Precast
- Sacred Heart Academy
- Saint Paul Catholic High School
- Savoy Linen Services, Inc.
- Scan Tool Company
- Schick
- Shop Rite, Meriden
- Sikorsky Aircraft
- Skinner Valve
- Smurfit Stone
- St. Francis Mount Sinai
- Stafford Springs Elementary School
- Staples Distribution Center
- Sterling Engineering Corporation
- Stew Leonards
- Sumitomo Bakelite North America
- Target Stores
- Tek Motive, Inc.
- The Birmingham, LLC
- The Miller Company
- The Taylor & Fenn Company
- Theis
- Tilcon Connecticut, Inc.
- US Surgical Corp
- Unified Sports
- United Abrasives, Inc.
- VA Medical Center
- Valley Container
- Walgreens Store
- Walmart
- Waterbury Hospital
- Western Connecticut Academy for International Study
- Wilton High School
- Windham High School
- Windsor Airmotive, Inc.
- Wiremold Company
- Woodard & Curran
- Yale University

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**Connecticut
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The Northeast Utilities System



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The United Illuminating Company

Connecticut's Energy Efficiency Programs are funded by the Conservation Charge on customer bills.

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Wallingford Electric Division



Connecticut Energy Efficiency Fund Activities Help Protect the Environment

THE LIFETIME SAVINGS RESULTING FROM THE 2007 PROGRAMS IS 4.3 BILLION KWH.
THIS IS EQUIVALENT TO:



or



or



or



or

BASED ON 2007 DATA

*BASED ON REGIONAL 2005 MARGINAL EMISSIONS RATES FROM ISO-NE AND CO₂ CONTENT OF FUEL SOURCE.

ALL ENVIRONMENTAL EMISSIONS DATA REFERENCED IN THIS DOCUMENT ARE IN "SHORT TONS."