

# Energy Efficiency Board 2013 Programs and Operations Report



MARCH 1, 2014

# The Year in Review

## EMPOWERING OUR STATE TO MAKE SMART ENERGY CHOICES



On behalf of the Energy Efficiency Board, I am pleased to deliver the 2013 Programs and Operations Report to the Connecticut General Assembly. This annual report details the steps that the Energy Efficiency Fund has taken to fulfill its primary objective: empowering all of our state's residents and businesses to use energy more efficiently.

In 2013, Connecticut moved up to fifth place in The American Council for an Energy-Efficient Economy's (ACEEE) ranking of state energy efficiency policies and implementation. This is a reflection of Governor Malloy's commitment to energy efficiency, and shows that state residents and business owners understand the economic and environmental need for it.

The energy-saving programs offered through the Energy Efficiency Fund play a vital economic role for Connecticut. For every \$1 spent on energy efficiency, Connecticut receives electric, gas, fuel oil, and propane system benefits valued at nearly \$2.40.

This continued return on investment demonstrates that Energy Efficiency Fund programs are a powerful economic incentive: they reduce customer costs, generate jobs, and make the state's businesses more competitive. Together with other initiatives being taken across the state, the accomplishments of the Energy Efficiency Fund are helping to make Governor Malloy's aggressive energy efficiency goals a reality.

In 2013, we embarked on a unified approach to marketing the state's clean energy programs via the Energize Connecticut initiative. We also saw the introduction of several new innovative financing programs to enable more consumers to take advantage of these effective energy solutions. 2013 also brought the implementation of the statewide energy dashboard on EnergizeCT.com – a public reporting tool that is being emulated by other states. The approved increased savings goals and funding for energy efficiency, as well as the adoption of a three-year plan, were also significant milestones for the Energy Efficiency Fund in 2013.

As we move into 2014, we will continue to introduce innovative program design elements and seek out opportunities to maximize energy savings and collaborate with our partners and stakeholders, so that we can meet the goals and deliver the economic and environmental benefits that our residents, businesses and municipalities expect.

Sincerely,

**Jamie Howland** of ENE (Environment Northeast) and Chairperson of the Connecticut Energy Efficiency Board

## ENERGY EFFICIENCY FUND 2013 RESIDENTIAL PROGRAM SAVINGS



**Customers Served**  
477,340



**CO<sub>2</sub> Emissions Reduced**  
90,744 Tons (Annual)



**Annual Savings**  
\$29.2 Million



**Lifetime Savings**  
\$318.9 Million



**MMBTUs**  
**Annual** 834.7 Thousand  
**Lifetime** 11.3 Million



**Energy Savings**  
**kWh Annual** 123.0 Million  
**kWh Lifetime** 935.2 Million

(kWh = Electricity, CCF = Natural Gas, Gallons = Fuel Oil & Propane)  
**CCF Annual** 2.3 Million  
**CCF Lifetime** 43.2 Million  
**Gallons Annual** 1.3 Million  
**Gallons Lifetime** 27.4 Million

Please note that the combined program totals can be found on the back cover of this report.

# About the Energy Efficiency Fund

Created in 1998 with the purpose of helping small and large businesses, homeowners and renters, and state and local government, the Energy Efficiency Fund supports an impressive portfolio of programs and initiatives designed to promote, encourage and facilitate the adoption of energy-efficient technologies and behaviors. These programs and their results are detailed in this report.

The Energy Efficiency Board (EEB) is an appointed group of 15 members representing private and public entities who serve and meet year-round. These members reflect a cross section of interests, providing representation for residential (including limited income), business, community (including not-for-profit) and municipal consumers. The EEB is assisted by consultants who are experts in their respective fields. The purpose of the EEB is to advise and assist the Fund's administrators in both the development and implementation of energy efficiency programs and initiatives. The Energy Efficiency Fund is administered by the Connecticut Light and Power Company, The United Illuminating Company, Connecticut Natural Gas Corporation, The Southern Connecticut Gas Company and Yankee Gas Services Company. The EEB also oversees the energy efficiency programs of the Connecticut Municipal Electric Energy Cooperative (CMEEC), and their 2013 activities are also detailed in this report.

Under the direction of the EEB, programs undergo impact evaluations conducted by independent third-party evaluators on a regular basis. The purpose of these impact evaluations is to verify that the reported savings are accurate and also

to help support continuous improvement in program performance. CL&P and UI also prepare and file an annual report entitled Connecticut Program Savings Documentation (PSD), that provides detailed, comprehensive documentation of claimed resource savings corresponding to Energy Efficiency Fund programs. Savings from programs are reported to regulatory bodies and used to generate additional funding from both the ISO-New England Forward Capacity Market and Connecticut Class III Renewable energy markets and, therefore, the PSD and evaluations are a critical aspect of ensuring that program results are reliable and accurate.

## ENERGIZE CONNECTICUT

In 2012 the new brand, Energize Connecticut, was created. Energize Connecticut is now the overarching, public-facing brand that represents programs and services supported by the Energy Efficiency Fund and the Clean Energy Finance Investment Authority (CEFIA). The primary message of the brand is captured in its tagline, "Empowering you to make smart energy choices." In January 2013, EnergizeCT.com, a new state energy and environmental website, replacing CTEnergyInfo.com, was created and

launched. All of the program marketing and messaging administered by the utilities and CEFIA reflects this unified message, providing Connecticut residential, business and municipal customers with a comprehensive resource.

## CONNECTICUT IS A NATIONALLY RECOGNIZED LEADER IN ENERGY EFFICIENCY

In their 2013 State Energy Scorecard, The American Council for an Energy-Efficient Economy (ACEEE) ranked Connecticut fifth in the nation. This top-tier ranking indicates that Connecticut's energy efficiency programs are national models to be emulated. The ACEEE also designated the Energy Efficiency Fund's Home Energy Solutions<sup>SM</sup>, Residential New Construction, and Small Business Energy Advantage programs as programs to be recognized in their Fourth National Review of Exemplary Programs. The Department of Energy recognized the Fund as the 2013 ENERGY STAR<sup>®</sup> Partner of the Year in Energy Efficiency Program Delivery, as well as the ENERGY STAR Sustained Excellence Award for participation in the Northeast Retail Products Initiative, and with its ENERGY STAR Leadership in Housing Award for commitment to promoting energy-efficient construction.

## ENERGY EFFICIENCY FUND 2013 COMMERCIAL & INDUSTRIAL PROGRAM SAVINGS



**Businesses Served**  
4,040



**CO<sub>2</sub> Emissions Reduced**  
94,211 Tons (Annual)



**Annual Savings**  
\$24.2 Million



**Lifetime Savings**  
\$311.1 Million



**MMBTUs**

Annual	Lifetime
802.8 Thousand	10.3 Million



**Energy Savings** (kWh = Electricity, CCF = Natural Gas)

	kWh	CCF
Annual	162.8 Million	2.4 Million
Lifetime	2.1 Billion	30.6 Million

*Please note that the combined program totals can be found on the back cover of this report.*

# Residential Energy Solutions

## HOME ENERGY SOLUTIONS<sup>SM</sup> (HES)

HES | HES-Income Eligible | Home Performance with ENERGY STAR<sup>®</sup>

The Home Energy Solutions program portfolio includes in-home services for every household, at every income level, to address every type of energy efficiency improvement – from weatherization, to water heating, to home heating and cooling equipment. These full service solutions bring needed energy expertise right into a customer’s home using utility-authorized BPI professionals including home improvement contractors, oil dealers, heating and cooling contractors and insulation installers.

Making the most out of the initial HES visit continued to be the major focus in 2013. That first visit, when the customer is fully engaged, is the best time to discover and communicate the value of taking additional energy-saving steps such as heating and cooling equipment upgrades, improved insulation and window replacements.

In 2013 additional residential financing products became available through the Energy Efficiency Fund and CEFA. The HES leave behind materials were revised to include that information and the financing opportunities are included in the customized report every participant receives. Through these efforts the program received the EPA’s ENERGY STAR Partner of the Year award in 2013.

Our Home Performance with ENERGY STAR (HPwES) program focuses on custom measures and deeper, persistent savings and is a way to extend HES services through a broader market-based contractor community.

2013 was also a successful year for the Multi-family Initiative. Multi-family projects address a number of issues including central heating and cooling systems, common areas, parking lot lighting, and mixed residential and commercial areas. The Multi-family Initiative gives owners and managers of these buildings access to multiple energy efficiency programs through a single point of contact.



*“I am proud to have the opportunity to participate in the Energy SuperSTARS challenge. This initial assessment has taught me the importance of taking smart energy-saving measures in our home. Taking advantage of the affordable financing options, I am excited to move forward with the recommendations from the HES technicians.”*

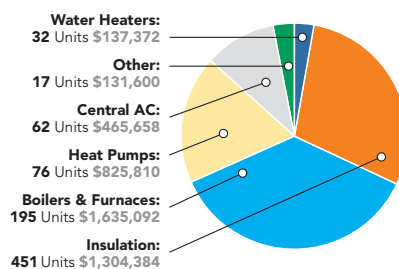
Karen Guastelle, Fairfield

### Residential Financing

Residential financing is in partnership with the Connecticut Housing Investment Fund (CHIF) and the Clean Energy Finance and Investment Authority (CEFA). Eligible Connecticut residents can finance home energy efficiency improvements recommended through the HES program with low-interest loans that can be repaid on their electric bills.

### 2013 RESIDENTIAL CHIF FINANCING

2013 residential financing totaled over \$4.5 million and 644 loans.



## 2013 HOME ENERGY SOLUTIONS – INCOME ELIGIBLE



**Customers Served**  
12,756



**CO<sub>2</sub> Emissions Reduced**  
18,439 Tons (Annual)



**Annual Savings**  
\$5.2 Million



**Lifetime Savings**  
\$89.9 Million



**MMBTUs**  
Annual: 218.3 Thousand  
Lifetime: 4.0 Million



**Energy Savings** (kWh = Electricity, CCF = Natural Gas, Gallons = Fuel Oil & Propane)

Category	Annual	Lifetime
kWh	12.0 Million	159.3 Million
CCF	1.1 Million	21.2 Million
Gallons	451.0 Thousand	9.4 Million

# 2013 Energy SuperSTARS Challenge

*“Participating in the challenge and working with our energy coach has truly helped us to identify and confirm wasted energy sources in our home, as well as understand the cost-effective options for better energy efficiency. It has also presented us with the opportunity to consider a more energy-efficient heating and cooling system for our home.”*

Gregg Gabinelle, West Hartford

In June of 2013, the Companies launched the ENERGY SuperSTARS Home Energy Efficiency Challenge to encourage Connecticut residents to become more energy efficient and to promote Home Energy Solutions – our flagship program.

The Energy SuperSTARS received a Home Energy Solutions energy assessment. This provided a sound starting point to identify key components such as how much energy is being lost through leaky doors or windows or what appliances might be outdated and inefficient, and more. In addition, Energy Coaches from CL&P and UI are helping them along the way.

The initial energy assessment revealed that both families should upgrade the insulation in their homes as well as insulate crawl spaces. Further, both families are now considering improving the heating and cooling systems in their homes based on what they learned from the assessment and the HES technicians. These changes will ultimately reduce their energy usage, which is great for the environment and results in lower energy bills.

The Guastelle family of Fairfield was eager to participate in the Energy SuperSTARS Challenge. As part of the initial process, they had a home energy assessment to determine if the home has areas

that can benefit from energy-efficient improvements. Here is a snap shot of their home and what was discovered during the process.

GUASTELLE HOME FACTS
<b>Home Size:</b> 1,200 Square Feet
<b>Heat Source:</b> Oil heat and hot water
ESTIMATED SAVINGS FROM INITIAL HES VISIT
<b>Blower Door / Air Sealing Savings:</b> 116 gallons oil, 80 kWh (furnace) (\$451 a year)
<b>Water measures:</b> 1 aerator, 2 showerheads, 11.3 gallons of oil (\$42 a year)
<b>Lighting:</b> 32 CFLs and 1 LED, 991 kWh (\$206 a year)
RECOMMENDATIONS
Upgrade existing insulation
Insulate crawlspace
Install a ductless split heat pump (recommended in place of window air conditioning units)
The projected savings with these recommendations would provide an additional annual savings of approximately \$300.

The second family participating in the challenge, the Gabinelle family from West Hartford, is aiming for a more comfortable home with lower energy bills – made possible by making smarter energy choices.

GABINELLE HOME FACTS
<b>Home Size:</b> 1,851 Square Feet
<b>Heat Source:</b> Natural gas heat and hot water
ESTIMATED SAVINGS FROM INITIAL HES VISIT
<b>Blower Door / Air Sealing Savings:</b> 94 ccf gas, (\$195 a year)
<b>Water measures:</b> 2 aerators, 5.7 ccf of gas (\$11 a year)
<b>Lighting:</b> 25 CFLs, 1,113 kWh (\$245 a year)
RECOMMENDATIONS
Insulate attic door, above addition and garage wall.
Upgrade attic insulation
2 part spray foam for rim joist
Insulate crawlspace
Upgrade/service boiler
Install a ductless split heat pump
The Gabinelle’s have already taken the recommendations from the assessment and completed insulating the garage wall and above the addition. The projected savings with these recommendations will provide an additional \$631 annually in savings.

To stay up-to-date on the Energy SuperSTARS Challenge, follow the journey to energy efficiency on Facebook by visiting [www.facebook.com/energizect](http://www.facebook.com/energizect)

## 2013 HOME ENERGY SOLUTIONS



**Customers Served**  
26,443



**CO<sub>2</sub> Emissions Reduced**  
26,586 Tons (Annual)



**Annual Savings**  
\$7.9 Million



**Lifetime Savings**  
\$125.2 Million



**MMBTUs**  
Annual: 288.0 Thousand  
Lifetime: 5.0 Million



**Energy Savings** (kWh = Electricity, CCF = Natural Gas, Gallons = Fuel Oil & Propane)

kWh Annual: 19.7 Million	CCF Annual: 989.3 Thousand	Gallons Annual: 889.8 Thousand
kWh Lifetime: 199.6 Million	CCF Lifetime: 18.5 Million	Gallons Lifetime: 17.9 Million

# Residential Energy Solutions

## RESIDENTIAL NEW CONSTRUCTION

The Residential New Construction (RNC) program provides incentives to builders and/or homeowners to incorporate advanced energy-efficient technologies (i.e., high-performance insulation, high efficiency natural gas boilers and furnaces, ductless heat pumps, geothermal heat pumps and heating and cooling equipment) into new and gut renovation homes.

In 2013, the RNC program administrators continued working with the building community to help them comply with the 2009 International Energy Conservation Code, adopted in October 2011, and with ENERGY STAR® Certified Homes Version 3.0, adopted in July 2012. Program administrators showed continued leadership in zero energy homes by offering a new Low Load Homes Bonus Incentive and continuing the Connecticut Zero Energy Challenge.

### 2013 CT ZERO ENERGY CHALLENGE WINNERS

The annual CT Zero Energy Challenge is a design and build competition that acts as an educational platform to showcase the very best high performance, zero net energy homes in the RNC program.

### OVERALL WINNERS – TIED

#### Owners:

David and Susan Griffiths

#### Builder:

Lehto Design Build

#### Project Highlights

- Designed to maximize solar gain with a more efficient shape
- Advanced framing techniques to reduce air infiltration
- Balanced energy recovery ventilation system
- Heat pump water heater
- 8 kilowatt photovoltaic array



*“When my husband and I first contemplated building an energy efficient home, I was skeptical. I didn’t think it would be possible to build a home that was efficient, had character, and felt comfortable. Now that I have, I wouldn’t do anything differently—it’s a beautiful home that utilizes energy-saving and renewable technologies and design features. I don’t think anyone would realize our home is net zero.”* Susan Griffiths

#### Owners:

Mike Randich and Lisa Spalla

#### Builder:

Wolfworks, Inc.

#### Project Highlights

- Built to International Passive House standards
- Mini-split air source heat pump
- Heat pump water heater
- High efficiency energy recovery ventilation system
- 10 kilowatt photovoltaic array



*“I’ve followed the Zero Energy Challenge from its inception. It sparked my interest in ‘passive homes’ and allowed me to get smarter on building a home that uses little to no energy. It also helped me connect with a builder that was able to bring this idea to life for me.”* Mike Randich

## 2013 RESIDENTIAL NEW CONSTRUCTION



#### Customers Served

885



#### CO<sub>2</sub> Emissions Reduced

1,926 Tons (Annual)



#### Annual Savings

\$519.3 Thousand



#### Lifetime Savings

\$9.3 Million



#### MMBTUs

Annual	Lifetime
22.5 Thousand	460.7 Thousand



#### Energy Savings

(kWh = Electricity, CCF = Natural Gas, Gallons = Fuel Oil & Propane)		
kWh Annual	CCF Annual	Gallons Annual
2.1 Million	146.5 Thousand	3.8 Thousand
kWh Lifetime	CCF Lifetime	Gallons Lifetime
32.9 Million	3.3 Million	91.6 Thousand

## OTHER WINNERS, BY CATEGORY



### LOWEST HOME ENERGY RATING SCORE INDEX WITHOUT RENEWABLES

**Builder:**  
BPC Green Builders



### LOWEST OVERALL HOME ENERGY RATING SCORE INDEX AND LOWEST OPERATING COST

**Homeowner:**  
Russell Campaigne  
**Architect:**  
CK Architects



### MOST AFFORDABLE PROJECT

**Builder:**  
Brookside Development

## RETAIL LIGHTING

The award-winning Retail Products program continues to promote the sale of ENERGY STAR® lighting products including CFLs and light emitting diode, or LED, lightbulbs in most of Connecticut's grocery, pharmacy, home improvement and big box retail stores. By working with lighting manufacturers and retailers to reduce the cost of energy-efficient lighting before reaching the retailer's shelves, customers can purchase discounted products without having to submit mail-in rebates or bring coupons to the store.



These discounted lighting products are also sold at events hosted by commercial and industrial businesses, state agencies, home shows, state and town community outreach events, and non-profit organizations. The Energy Efficiency Fund also supports the SmartLiving™ Catalog ([www.smartlivingcatalog.com](http://www.smartlivingcatalog.com)) for online purchase of a variety of lighting and other energy-efficient products. Additionally, the Fund continues to sponsor Shining Solutions, a fundraising program in which schools and community organizations sell CFLs to raise money and expand awareness of the benefits of efficient lighting.

### ADVANCING THE SALE OF LED LIGHT BULBS

In 2013, the big lighting story was the tremendous market adoption of LED lightbulbs. Energy Efficiency Fund incentives on ENERGY STAR certified LEDs were introduced in 2011 with a limited number of products on store shelves. By the beginning of 2013, there were over 100 different models of Fund-discounted LEDs available, including dimmable, omnidirectional replacement lightbulbs. In total, 423,420 LED lightbulbs were sold in 2013 with a Fund incentive – representing 13.8 percent of our total residential lighting sales, compared to 5.7 percent in 2012.

## 2013 RETAIL LIGHTING PRODUCTS



### Products Sold

CFLs	2,648,838
LEDs	423,420
Other Lighting	6,448



### Energy Savings

kWh Annual	89.3 Million	kWh Lifetime	543.4 Million
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### Annual Savings

\$15.5 Million



### CO<sub>2</sub> Emissions Reduced

43,727 Tons (Annual)



### MMBTUs

Annual	304.7 Thousand	Lifetime	1.9 Million
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### Lifetime Savings

\$94.1 Million

# Residential Energy Solutions

## HEATING, COOLING, HOT WATER, APPLIANCES, ELECTRONICS

In 2013, residential consumers took advantage of a variety of rebates designed to encourage the purchase of ENERGY STAR® certified products by reducing the premium price tag usually associated with energy-efficient technology.

Water Heater Rebates
Natural Gas Water Heaters
Heat Pump Water Heaters

Heating and Cooling Rebates
Natural Gas, Oil, Propane Furnace/Natural Gas Boiler
Heating/Ventilation/Air Conditioning (HVAC) (Additional incentives for Quality Installation & Verification program also available)
Ductless Heat Pumps
Geothermal Systems

Appliance Rebates
TopTen Refrigerators
TopTen Clothes Washers
TopTen Freezers

### TOPTEN USA AND MANUFACTURER PARTNERSHIPS

In 2013, Connecticut continued its partnership with TopTen USA. TopTenUSA.org/CT identifies the ten most efficient ENERGY STAR products in categories including televisions, computer monitors, laptops and desktop computers, refrigerators and freezers, dishwashers, clothes washers, water heaters, and LED lightbulbs.

Consumers are able to choose a product category and compare the energy-saving features and benefits of the ten most efficient models. They can then find a retailer near them who carries the product by entering their ZIP code. The site also links products to available Energy Efficiency Fund rebates including water heaters, refrigerators, clothes washers and freezers.

Additionally, the companies partnered with a leading manufacturer on a regional market test for heat pump water heaters. GE offered a \$200 manufacturer discount which, when coupled with the existing Fund rebate, provided a compelling offer. In 2013, GE heat pump water heater sales accounted for 70 percent of total sales.

In October, 2013, a natural gas water heater midstream incentive pilot was launched. Modeled after the retail lighting instant rebate program, the pilot was designed to transform the existing mail-in rebate into a point-of-sale instant discount on the equipment cost delivered to the installing contractor through participating distributors. Following a Request for Proposals, WinWholesale, a distributor with 17 participating locations in Connecticut, was the first to implement the midstream model. The pilot was successful, with 45 units sold, resulting in an expansion to additional distributors statewide.



### 2013 RETAIL REBATES

	Number of Rebates	Annual Energy Savings			Lifetime Energy Savings			MMBTU		CO <sub>2</sub> Savings		Dollar Savings	
		kWh	CCF	Oil & Propane	kWh	CCF	Oil & Propane	Annual	Lifetime	Annual	Lifetime	Annual	Lifetime
Natural Gas Water Heater	206	—	10,952	—	—	215,544	—	1,127	22,179	66	1,300	\$9,156	\$180,202
Heat Pump Water Heater	408	683,400	—	—	8,200,800	—	—	2,332	27,989	335	4,017	\$105,588	\$1,267,051
HVAC: Central Air, Furnace, Boilers	6,193	1,223,159	308,888	36,907	21,739,680	5,787,021	741,339	41,078	772,498	2,942	55,191	\$598,623	\$11,238,121
Geothermal Heat Pumps	25	44,158	—	—	794,852	—	—	151	2,713	22	389	\$6,823	\$122,807
Ductless Heat Pump	655	607,271	—	—	10,930,905	—	—	2,073	37,307	297	5,354	\$93,825	\$1,688,862
TopTen Appliances	503	97,891	149	—	1,090,539	1,635	—	349	3,890	49	544	\$15,249	\$169,859



# Community and Education Energy Solutions

## **eesmarts™**

In 2013, the innovative **eesmarts** program conducted 26 professional development workshops to 466 educators regarding the basics of energy efficiency, renewable energy, climate change and how electricity works. The program's comprehensive K–12 energy education lessons, activities and materials align with the state's science and math frameworks and the Next Generation Science Standards. More than 7,700 **eesmarts** curriculum materials were distributed in 2013, including the program's new *Solar Adventures* curriculum for Grade 9–12 educators.

The program conducted extensive educational outreach to Connecticut's youth by hosting 125 eeEvents at schools and museums and sponsored the 2013 Connecticut Science & Engineering Fair's Sustainable Resources and Practices (middle school), Future Sustainability (high school) and Alternative/Renewable Energy (middle/high school) categories. From in-classroom presentations and experiments, visits from Effy the Efficient Dinosaur, the program's partnership with the National Theatre for Children to bring *The Energized Guyz* presentation to over 100 Connecticut schools and 28,000 children, and the launch of the **eesmarts** Energy-Saving Challenge, the program continues to focus on educating future generations about saving energy.



State Senator Gayle Slossberg and Mark Herde, Plumbing & Heating Senior, Platt Tech HS

## **TECHNICAL SCHOOL E-HOUSE**

In 2013, the Connecticut Technical High School System, in partnership with the Energy Efficiency Fund and the Clean Energy Finance & Investment Authority, opened the state's third, fourth and fifth E-Houses at Ella T. Grasso Technical High School in Groton, Platt Technical High School in Milford and Howell Cheney Technical High School in Manchester. The nation's first high school laboratories for learning "green" construction, the E-House initiative provides an energy efficiency and clean energy curriculum for the schools' architectural, carpentry, electrical, HVAC and plumbing faculty and students. Designed to move educators and students beyond the textbook to hands-on training, this workforce development initiative was highlighted in the 2012 American Council for an Energy-Efficient Economy Summer Study in Pacific Grove, California and has been emulated by other technical high school systems from across the United States. Designed and built by students and faculty, each E-House incorporates solar photovoltaic and solar thermal systems, weatherization and energy efficiency labs in the design of the project.

## **9TH ANNUAL STUDENT CONTEST**

More than 1,000 schoolchildren in grades K–12 submitted entries in the **eesmarts** annual Student Contest—the most in its nine-year history. Entries took the form of posters, limericks, essays and songs on topics including climate change, energy efficiency, renewable energy sources and recycling. Several of the high school submissions evolved into community projects. More than 100 parents and supporters attended the June awards ceremony, along with Katie Dykes, Deputy Commissioner for Energy, Connecticut Department of Energy and Environmental Protection (DEEP), Jamie Howland of ENE (Environment Northeast) and Chairperson of the Connecticut Energy Efficiency Board and WFSB Channel 3 Meteorologist Mark Dixon, who served as Master of Ceremonies.



2013 **eesmarts** student contest winners and dignitaries.

***"The eesmarts program and annual Student Contest play an important role in helping students from kindergarten all the way through high school learn and appreciate the importance of energy efficiency and renewable energy, positioning them for a lifetime of environmentally-conscious thinking."***

Katie Dykes, Deputy Commissioner for Energy, Connecticut Department of Energy and Environmental Protection

# Community and Education Energy Solutions

## MUSEUM PARTNERSHIPS

In 2013, the Energy Efficiency Fund continued its support of several interactive exhibits relating to energy, energy efficiency and renewable energy sources throughout the state. All of these educational public facilities host a variety of special events and school groups throughout the year.

### EXHIBITS ARE LOCATED AT:

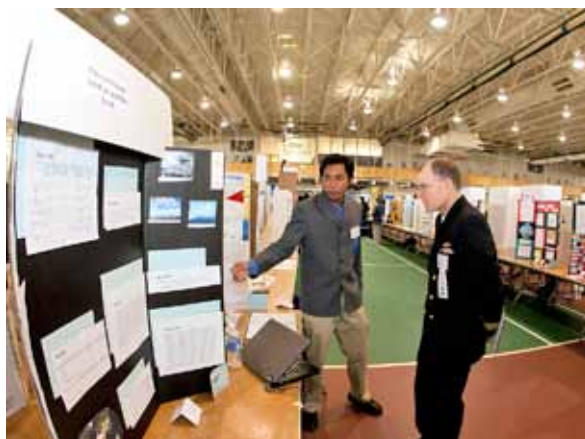
**Connecticut Science Center** (Hartford) – Energy City Gallery

**The Discovery Museum** (Bridgeport) – Energy Exhibit

**The SmartLiving™ Center** (Orange) – A professionally staffed facility that serves as a high-profile resource for promoting energy-efficient products, services and ideas

**Stepping Stones Museum for Children** (Norwalk) – Energy Lab! Gallery, traveling Mini-Conservation Quest<sup>SM</sup> Exhibit

**The Trash Museum** (Hartford) – The Energy-Recycling Connection Exhibit



2013 Connecticut Science Fair contestant R. Wendt shows off his project Effects of Volcanic Activity on Acid Rain Levels to a judge.

## SEMINARS AND EVENTS

Energy Efficiency Fund events reach every type of energy consumer.

### SAMPLE ACTIVITIES IN 2013 INCLUDE:

Commercial and industrial outreach including Chambers of Commerce events, contractor meetings, Connecticut Farm Energy workshops

Trade ally training seminars on topics including energy code, demand response, sustainability, lighting, high-performance homes, energy efficiency sales, Portfolio Manager, building and HVAC contractor training

Industry conference participation including Affordable Comfort Institute National Home Performance Conference, Design and Trades Conference, CBIA Environmental & Energy Conference, AESP Energy Efficiency Conference, CTSSA Energy Summit, Association of Energy Engineers events, Northeast Energy Efficiency Partnerships Summit, and What's the Deal? Energy Summit

Residential, community and educational outreach including Clean Energy Communities events, Council of Small Towns (COST) forum, Latinas & Power Symposium, CT Housing Coalition Conference, Connecticut Conference of Municipalities annual conference, home shows, senior fairs, library events, social agency forums, school fairs, Earth Day events, Family Science Day, **eesmarts** events and forums, Connecticut Science Fair, Technical High School E-House openings, and museum events



EPA ENERGY STAR Partner of the Year ceremony, Washington DC. Beth Craig, Director, U.S. EPA Climate Protection Partnership Division; Jessie Stratton, Director of Policy Development for the Connecticut Department of Energy and Environmental Protection and David Lee, Residential Program Manager, U.S. Department of Energy Building Technologies Office.

## HOME ENERGY REPORTS

In 2013, 17,000 randomly selected CL&P customers continued to receive customized reports detailing their home's energy use compared to "neighbors" with similar-sized homes within a one- to two-mile radius. These participants receive monthly personalized energy use reports and also have access to interactive energy information through an online portal. The printed reports and portal include energy-saving tips and positive reinforcement encouraging customers to engage in energy conservation behaviors and to take advantage of the energy-saving services and rebates available in Connecticut. As a result of the 2013 reports, the 17,000 CL&P customers saved over 7.3 gigawatt-hours.

## CLEAN ENERGY COMMUNITIES



State and Federal Government and Utility Representatives gather to honor municipalities at the Bright Idea Grant award ceremony in December 2013.

A partnership between CEFIA and the Fund utility administrators. Working from a grassroots and grasstops perspective, the goal of the Clean Energy Communities program is to encourage Connecticut cities and towns to reduce their municipal building energy consumption incrementally to reach a 20 percent reduction by 2018, and to purchase 20 percent of their municipal electrical needs from renewable sources by 2018—a holistic energy approach committed to by 77 Connecticut municipalities in 2013.

Points earned through participation in Energy Efficiency Fund programs result in a “Bright Idea Grant” ranging from \$5,000 to \$15,000 that can be used toward a community-selected energy-saving project, such as hiring an energy auditor to assess/benchmark municipal buildings or to leverage existing funds to make energy-saving improvements to a school. Renewable energy points earn a community a clean energy system equivalent to a 1 kilowatt solar photovoltaic system. In December, 35 communities attended a Bright Idea Grant recognition ceremony at the State Capitol.

In 2013, CL&P and UI launched the Energize Hamden and Energize Waterbury campaigns. These campaigns provided focused, saturated outreach efforts that included multiple events, neighborhood canvassing, localized advertising and public relations. The objective was to introduce residents and businesses to programs and services and to then provide them with additional resources including fixed pricing for insulation and heating equipment, coupled with attractive financing options.

*Top right: Energize Hamden kick-off Kerry O’Neil of CEFIA, Pat McDonnell of UI, Mayor Scott Jackson, Katie Dykes DEEP Deputy Commissioner, Dan Esty Former DEEP Commissioner, and Roddy Diotalevi, UIL.*

*Bottom right: Joe Geary, Chief of Staff for the City of Waterbury, joins staff from Gulick Building and Development, CL&P and TechniArt at an Energize Waterbury lighting fair.*

### ENERGIZE WATERBURY RESULTS

<b>3,445</b> Home Energy Solutions <sup>SM</sup> (HES) services
<b>568</b> HVAC upgrades
<b>90</b> Insulation upgrades
<b>8</b> Natural gas conversions
<b>5,875</b> energy-saving lighting products sold
<b>61</b> Outreach events
Estimated annual energy savings <b>\$496,549</b>
Estimated <b>1,582,649</b> kWh of electricity, <b>140,604</b> CCF of natural gas and <b>16,843</b> gallons of oil annually

### ENERGIZE HAMDEN RESULTS

<b>217</b> Home Energy Solutions <sup>SM</sup> (HES) services
<b>107</b> HVAC upgrades
<b>32</b> Insulation upgrades
<b>38</b> Natural gas conversions
<b>54</b> Outreach events
Estimated annual energy savings <b>\$82,494</b>
Estimated annual savings per participant <b>\$420</b>
Total Estimated <b>175,068</b> kWh of electricity, <b>11,766</b> CCF of natural gas and <b>8,802</b> gallons of oil annually.

Note: Results in both campaigns reflect activity from April through October 30, 2013. Residents continue to take action.



Municipalities that signed or resigned the Clean Energy Communities pledge in 2013 are highlighted in green on pages 15-17.

# Business Energy Solutions

## SMALL BUSINESS ENERGY ADVANTAGE

The small business program continues to provide a competitive solution to a growing number of businesses throughout Connecticut. In 2013 we more than satisfied our mission to move beyond lighting-only projects. In 2013, 420 projects were designated as comprehensive – meaning that upgrades were made to a combination of several technologies, including lighting, refrigeration, motor controls and natural gas efficiency. This is an increase from 351 comprehensive projects in 2012.



STONE ACADEMY	
<b>COMPREHENSIVE MEASURES INCLUDE</b>	
Energy-efficient lighting throughout	
Motion sensors in unoccupied spaces	
HVAC Upgrades	
<b>ESTIMATED ANNUAL SAVINGS</b>	
Energy Efficiency Fund incentive: \$21,812	
94,151 kWh saved annually	
\$16,947 saved annually	

*“As both an academic institution and a Connecticut small business, we take pride in our sustainability efforts and in setting a positive example for our peers. Seventeen thousand dollars in annual savings translates to a full scholarship for one of our programs or funding for a new medical lab, which are invaluable advances to keep us at the forefront of our industry.”*

Joe Bierbaum, President & CEO of Stone Academy



*“Being able to get incentives for the HVAC equipment and all the lighting and then have the rest of it financed at zero percent interest through my electric bill. It was a no brainer. I couldn’t do it fast enough.”*

Doug Zepka,  
Dunkin Donuts Franchise Owner

DUNKIN DONUTS (TORRINGTON)	
<b>COMPREHENSIVE MEASURES INCLUDE</b>	
LED lighting	
Refrigerator door heater and evaporation controls	
Energy-efficient roof top air conditioning unit	
Dual enthalpy control	
<b>ESTIMATED ANNUAL SAVINGS</b>	
Energy Efficiency Fund incentive: \$15,343	
Balance funded through 0% SBEA loan	
31,000 kWh saved annually	
\$4,900 saved annually	

## 2013 SMALL BUSINESS ENERGY ADVANTAGE PROGRAM



**Businesses Served**  
1,600



**CO<sub>2</sub> Emissions Reduced**  
16,339 Tons (Annual)



**Annual Savings**  
\$4.5 Million



**Lifetime Savings**  
\$55.4 Million



**MMBTUs**

Annual	Lifetime
121.0 Thousand	1.5 Million



**Energy Savings** (kWh = Electricity, CCF = Natural Gas)

kWh Annual	CCF Annual
31.9 Million	116.1 Thousand
kWh Lifetime	CCF Lifetime
390.2 Million	1.4 Million

## NEW CONSTRUCTION / EQUIPMENT

In 2013, the Energy Efficiency Fund continued to support commercial and industrial customers initiating new construction or new electric or natural gas equipment purchases through an incentive structure that offsets the incremental cost between baseline equipment and standards and high efficiency options.

This prescriptive approach is effective for many types of facilities, but for certain complex buildings with aggressive performance targets, a "whole building performance" option is available. For those participants, savings are expressed as a percentage improvement over the baseline building code, measured by total energy savings from all sources.

In 2013, CL&P and UI's market segment analysis showed that most new construction projects were happening in the retail segment, especially with chain stores. Government facilities and public schools were also active participants. Manufacturers were the leaders for process efficiency improvements, with compressors, air dryers, and plastic injection molding machines at the top of the list.

*"The process was clear and straightforward. Our UI representative worked hand-in-hand with us and with equipment providers to effectively manage our upgrades. We use the money we're now saving on energy to pay back the cost of the project, and once the project is paid off we'll be able to reinvest our savings elsewhere in our company."*

Rich Kaminski,  
General Manager of Calabro Cheese

CALABRO CHEESE	
COMPREHENSIVE MEASURES INCLUDE	
Comprehensive project, including lighting retrofit	
Refrigeration motor replacement and controls	
Steam trap survey, repair and replacement	
Compressed air leak study, followed by installation of new compressed air distribution system	
Insulation of steam traps, including remote monitoring, with insulation jackets	
ESTIMATED ANNUAL SAVINGS	
Energy Efficiency Fund incentive: \$56,457	
148,949 kWh saved annually	
62,556 ccf natural gas saved annually	
\$95,770 saved annually	



*"We are always seeking opportunities to cut operating costs, perform more efficiently and increase the comfort of our buildings. When we expanded our Avon facility, we realized what our energy and cost saving potential could be through participation in Energize Connecticut programs. Making the switch to energy-efficient equipment was a no-brainer."*

Randall Mertz,  
CEO of ORAFOL Americas Inc.

ORAFOL AMERICAS INC.	
COMPREHENSIVE MEASURES INCLUDE	
Energy-efficient lighting	
High efficiency heating, ventilation and air conditioning system	
ESTIMATED ANNUAL SAVINGS	
Energy Efficiency Fund incentive: \$730,000	
1,600,000 kWh saved annually	
110,000 ccf natural gas saved annually	
\$335,000 saved annually	

### 2013 NEW CONSTRUCTION & EQUIPMENT



**Businesses Served**  
1,125



**CO<sub>2</sub> Emissions Reduced**  
29,512 Tons (Annual)



**Annual Savings**  
\$7.4 Million



**Lifetime Savings**  
\$113.6 Million



**MMBTUs**  
Annual: 263.5 Thousand  
Lifetime: 4.1 Million



**Energy Savings** (kWh = Electricity, CCF = Natural Gas)  
kWh Annual: 48.6 Million  
kWh Lifetime: 746.5 Million  
CCF Annual: 949.7 Thousand  
CCF Lifetime: 15.2 Million

# Business Energy Solutions

## BUSINESS AND ENERGY SUSTAINABILITY

Programs: Energy Opportunities | Operations & Maintenance Services | Retro Commissioning | Process Reengineering for Increased Manufacturing Efficiency | Business Sustainability Challenge

In 2013, utility administrators and the EEB's commercial and industrial working group continued to address energy use in the context of the total lifecycle of a building and the behaviors of the owners and occupants within them.

This sustainable approach to energy management includes an emphasis on ongoing improvements and maintenance, education and outreach, and increased financing opportunities through support of various vehicles including performance contracting and the C-PACE program (Commercial-Property Assessed Clean Energy).



*"To take advantage of what is offered, your whole company has to be willing to commit. The company as a whole has to change their mindset, from top down. It's an excellent opportunity to kick-start your business and move it in a direction where other people aren't having that opportunity."*

Nick Pescosolido, Tooling/Production Manager at Empire Industries



FAIRFIELD WASTE WATER MANAGEMENT
<b>COMPREHENSIVE MEASURES INCLUDE</b>
Interior and exterior lighting
Energy management system
Blower replacement
<b>ESTIMATED ANNUAL SAVINGS</b>
Energy Efficiency Fund incentive: \$160,798
379,472 kWh saved annually
3,658 ccf natural gas saved annually
\$53,131 annual savings

*"Providing quality services to our residents in a cost-effective manner is critical to our operations. The Energize Connecticut programs allowed us to reach those goals."*

Edward Boman, Assistant Director of Public Works, Fairfield

EMPIRE INDUSTRIES
<b>COMPREHENSIVE MEASURES INCLUDE</b>
High efficiency motors and variable frequency drives
Lighting
HVAC controls
LEAN manufacturing training
<b>ESTIMATED ANNUAL SAVINGS</b>
Energy Efficiency Fund incentive: \$84,525
226,777 kWh saved annually
\$33,061 saved annually

### 2013 BUSINESS AND ENERGY SUSTAINABILITY



**Businesses Served**  
1,315



**CO<sub>2</sub> Emissions Reduced**  
48,360 Tons (Annual)



**Annual Savings**  
\$12.3 Million



**Lifetime Savings**  
\$142.1 Million



**MMBTUs**  
Annual: 418.4 Thousand  
Lifetime: 4.7 Million



**Energy Savings** (kWh = Electricity, CCF = Natural Gas)  
kWh Annual: 82.3 Million  
kWh Lifetime: 952.1 Million  
CCF Annual: 1.3 Million  
CCF Lifetime: 14.0 Million

## BUSINESS AND ENERGY SUSTAINABILITY



*“We hope that our efforts will position us as an energy thought leader within our industry and will help further Connecticut’s leadership role in energy efficiency.”*

Marty Gavin, President and CEO of Connecticut Children’s Medical Center



CONNECTICUT CHILDREN’S MEDICAL CENTER
<b>COMPREHENSIVE MEASURES INCLUDE</b>
Energy-efficient lighting
Energy management system upgrades
Envelope improvements
Valve and pipe insulation
Water-saving devices
<b>ESTIMATED ANNUAL SAVINGS</b>
Energy Efficiency Fund incentive: \$523,510
785,178 kWh saved annually
37,406 ccf natural gas saved annually
\$113,647 saved annually

STRATFORD PERFORMANCE CONTRACTING
<b>MEASURES IN 37 MUNICIPAL BUILDINGS:</b>
Lighting and lighting controls
Boiler plant upgrades
Building management systems upgrades
Building envelope improvements
Steam trap replacement
Water conservation
Transformer upgrades
Renewable energy (wind turbine and photovoltaic)
<b>ESTIMATED ANNUAL SAVINGS</b>
Energy Efficiency Fund incentive: \$790,879
1,512,356 kWh saved annually
174,794 ccf natural gas saved annually
\$496,625 annual savings



*Over the 15-year energy performance contract period, the project is expected to pay for itself by providing an estimated \$9.9 million in energy savings and \$791,000 in incentive payments made available through the Fund.*

*Providing infrastructure and technology updates on 37 buildings, including town hall, schools, firehouses, the police station, water treatment facilities and office buildings.*

## PROTECTING CONNECTICUT'S TREASURED ENVIRONMENT

Improving air quality in the Northeast continues to be an important focus of the Connecticut Energy Efficiency Fund.



Reducing the amount of energy used in Connecticut results in less power plant operation time and significantly reduces the emission of carbon dioxide, oxides of nitrogen and sulfur oxides – which are all associated with environmental issues like ozone depletion, climate change, public health problems, acid rain and smog.

By playing an integral role in helping to reduce greenhouse gas and air pollutant emissions, the Energy Efficiency Fund's programs play a vital role in the overall economic and environmental health of Connecticut.

The lifetime energy savings achieved through Energy Efficiency Fund programs in 2013 resulted in

AVOIDED EMISSIONS OF  
**2,269,123**

TONS OF CARBON DIOXIDE,  
EQUIVALENT TO REMOVING

**335,799**

CARS OFF THE ROAD FOR A YEAR.

### REFLECTING REDUCTION IN CRITERIA POLLUTANTS AND CARBON DIOXIDE (IN TONS)

AIR EMISSIONS	ANNUAL SAVINGS 2013			LIFETIME SAVINGS 2013		
	Electric	Natural Gas	Fuel Oil & Propane	Electric	Natural Gas	Fuel Oil & Propane
SO <sub>x</sub> Tons	8	1	88	82	22	1,797
NO <sub>x</sub> Tons	22	219	12	229	3,466	242
CO <sub>2</sub> Tons	139,988	28,157	16,810	1,481,100	444,709	343,565



# DEMONSTRATING ECONOMIC BENEFITS THROUGHOUT CONNECTICUT

This list includes energy efficiency and conservation benefits provided to residential, commercial and industrial customers of the electric and gas utilities and the Connecticut Municipal Electric Energy Cooperative (CMEEC).

Town	Energy Incentives	Annual kWh Savings	Lifetime kWh Savings	Peak Demand kW	Annual CCF Savings	Lifetime CCF Savings	Annual Gallons (Oil & Propane)	Lifetime Gallons (Oil & Propane)	Annual Dollars Saved	Lifetime Dollars Saved	Annual CO <sub>2</sub> (Tons) Saved
Andover	\$47,001	82,785	999,944	14	0	0	1,951	41,230	\$20,437	\$312,534	64
Ansonia	\$184,640	396,504	5,254,863	48	4,738	91,701	7,485	162,868	\$95,701	\$1,536,190	319
Ashford	\$43,216	95,184	1,177,685	4	0	0	2,029	44,787	\$22,334	\$345,984	69
Avon	\$1,258,424	2,802,526	43,380,447	332	111,468	2,156,611	10,759	208,211	\$567,655	\$9,242,857	2,176
Barkhamsted	\$38,912	68,264	745,866	15	0	0	1,555	30,173	\$16,850	\$234,627	53
Beacon Falls	\$182,945	512,589	6,884,486	58	862	14,055	2,830	58,484	\$91,512	\$1,288,212	293
Berlin	\$554,433	2,949,443	24,589,709	348	15,375	285,840	7,917	158,663	\$500,554	\$4,596,461	1,639
Bethany	\$60,486	138,779	1,464,631	16	0	0	2,372	45,063	\$30,977	\$401,374	98
Bethel	\$359,394	970,852	11,815,154	125	4,884	82,258	4,663	98,406	\$172,192	\$2,232,059	560
Bethlehem	\$29,729	21,437	171,703	3	0	0	2,446	53,680	\$12,358	\$224,556	37
Bloomfield	\$2,477,196	6,699,128	70,365,399	859	36,114	581,267	9,155	174,773	\$1,101,748	\$11,804,930	3,615
Bolton	\$88,074	109,224	1,305,786	9	0	0	4,597	95,910	\$35,248	\$580,824	111
Bozrah	\$63,000	286,494	1,461,853	40	0	0	0	0	\$44,260	\$219,980	140
Branford	\$510,700	1,191,123	11,261,479	139	42,198	649,641	6,536	131,484	\$245,188	\$2,793,779	920
Bridgeport	\$2,268,610	6,726,123	78,556,445	1,035	402,250	8,271,034	72,942	1,586,285	\$1,670,761	\$25,585,351	6,669
Bridgewater	\$7,086	7,314	79,510	2	0	0	478	7,070	\$3,056	\$40,294	10
Bristol	\$5,849,664	7,222,330	73,594,608	885	97,917	1,662,819	36,451	690,751	\$1,343,763	\$15,317,949	4,588
Brookfield	\$564,368	5,130,456	45,384,052	484	4,465	77,341	7,461	156,471	\$825,983	\$7,520,608	2,632
Brooklyn	\$285,947	734,908	10,635,552	113	3,345	47,569	7,578	173,141	\$147,386	\$2,352,400	479
Burlington	\$103,808	141,518	1,420,296	31	0	0	5,428	105,555	\$43,240	\$629,770	135
Canaan	\$39,520	240,419	1,697,801	49	0	0	1,822	40,299	\$43,335	\$391,116	134
Canterbury	\$21,518	43,262	461,756	3	0	0	720	12,859	\$9,486	\$119,965	30
Canton	\$355,633	1,523,045	9,709,533	173	1,305	24,125	10,699	210,476	\$278,555	\$2,313,498	883
Chaplin	\$50,267	94,270	1,115,750	4	0	0	1,653	35,469	\$21,343	\$313,393	68
Cheshire	\$1,299,756	2,477,950	27,679,256	318	30,452	528,737	21,636	430,122	\$493,273	\$6,325,226	1,659
Chester	\$93,247	140,411	969,457	8	0	0	4,641	90,025	\$39,519	\$493,167	122
Clinton	\$266,577	650,729	6,024,820	144	5,203	92,375	9,133	180,608	\$140,893	\$1,698,176	461
Colchester	\$455,286	1,061,900	12,770,813	247	0	0	3,831	72,155	\$179,486	\$2,213,247	568
Colebrook	\$9,190	15,058	115,754	2	0	0	662	12,377	\$4,984	\$67,092	16
Columbia	\$86,165	160,718	1,877,103	18	0	0	2,217	43,583	\$33,657	\$455,438	106
Cornwall	\$132,765	189,566	2,176,053	18	0	0	6,384	130,460	\$53,481	\$816,690	165
Coventry	\$190,897	392,221	4,507,350	42	0	0	6,520	120,052	\$86,370	\$1,153,355	272
Cromwell	\$585,155	1,816,913	19,271,672	235	16,564	251,525	2,955	62,302	\$306,147	\$3,368,377	1,026
Danbury	\$1,546,023	6,589,485	63,289,779	662	35,827	580,772	9,145	183,731	\$1,084,278	\$10,770,295	3,558
Darien	\$762,409	1,781,218	25,834,598	154	7,500	140,559	12,764	264,727	\$330,609	\$5,037,369	1,066
Deep River	\$557,188	1,083,839	14,004,361	406	0	0	3,533	72,030	\$181,934	\$2,402,844	577
Derby	\$548,048	3,115,522	26,460,044	306	915	15,736	8,099	181,935	\$515,273	\$4,741,704	1,637
Durham	\$126,167	158,874	1,641,087	26	0	0	6,900	132,922	\$51,872	\$774,129	162
East Granby	\$111,572	215,230	2,590,715	37	2,643	39,429	2,734	59,583	\$46,651	\$668,859	157
East Haddam	\$101,531	186,100	2,145,260	25	0	0	3,569	70,155	\$42,395	\$589,533	132
East Hampton	\$102,009	96,831	900,437	15	0	0	7,401	149,151	\$43,504	\$708,315	134
East Hartford	\$814,316	1,798,218	21,736,053	187	23,584	428,418	11,871	235,909	\$345,604	\$4,607,117	1,175
East Haven	\$497,108	2,236,318	18,711,361	216	79,297	744,846	8,243	176,027	\$444,835	\$4,191,295	1,681
East Lyme	\$239,863	573,662	6,639,278	76	318	4,565	5,459	110,885	\$110,607	\$1,446,058	350
East Windsor	\$107,498	409,151	2,210,838	41	3,995	60,177	4,191	84,178	\$83,095	\$719,400	276
Eastford	\$17,822	67,808	917,362	8	0	0	63	1,119	\$10,732	\$142,636	34
Easton	\$210,856	307,314	3,218,699	18	7,246	93,187	3,892	78,730	\$68,645	\$873,562	240
Ellington	\$404,508	478,622	8,737,583	45	17,936	257,045	5,830	111,629	\$112,490	\$1,994,858	417
Enfield	\$1,276,111	6,145,175	53,956,898	636	57,782	799,158	17,773	369,278	\$1,069,315	\$10,321,426	3,586
Essex	\$136,058	241,468	2,555,876	32	0	0	6,926	145,443	\$65,393	\$975,642	207
Fairfield	\$1,570,908	4,710,779	44,640,857	528	63,282	1,172,449	23,367	510,508	\$875,234	\$9,827,132	2,989
Farmington	\$1,735,452	2,703,477	32,037,738	503	141,628	1,862,332	12,045	240,424	\$582,434	\$7,408,021	2,325
Franklin	\$6,321	18,315	229,799	3	0	0	121	2,189	\$3,328	\$43,559	11

The towns indicated in **green** are Clean Energy Communities.

CONTINUED ON NEXT PAGE

Town	Energy Incentives	Annual kWh Savings	Lifetime kWh Savings	Peak Demand kW	Annual CCF Savings	Lifetime CCF Savings	Annual Gallons (Oil & Propane)	Lifetime Gallons (Oil & Propane)	Annual Dollars Saved	Lifetime Dollars Saved	Annual CO <sub>2</sub> (Tons) Saved
<b>Glastonbury</b>	\$1,220,697	3,190,279	28,676,711	351	68,489	1,065,085	14,709	286,499	\$607,332	\$6,375,758	2,153
<b>Goshen</b>	\$44,384	102,005	1,285,420	15	0	0	1,205	21,212	\$20,561	\$278,176	65
<b>Gosny</b>	\$595,973	1,069,655	12,811,063	155	0	0	4,593	88,545	\$183,646	\$2,282,881	581
<b>Greenwich</b>	\$1,121,462	2,176,702	26,220,893	293	36,000	624,853	6,555	133,554	\$392,512	\$5,032,374	1,366
<b>Griswold</b>	\$142,725	448,676	5,238,700	55	0	0	2,285	47,717	\$78,473	\$980,101	248
<b>Groton</b>	\$1,554,031	5,476,541	56,387,515	1,076	19,581	287,176	285	5,308	\$863,401	\$8,758,843	2,804
<b>Guilford</b>	\$620,963	1,159,607	11,489,946	162	15,905	287,314	21,736	440,817	\$279,785	\$3,758,792	937
<b>Haddam</b>	\$58,581	96,020	1,095,372	14	0	0	2,208	42,686	\$23,685	\$336,058	75
<b>Hamden</b>	\$937,044	3,125,990	23,575,574	324	46,971	904,400	33,823	707,669	\$658,979	\$7,208,156	2,246
<b>Hampton</b>	\$7,185	6,571	50,946	1	0	0	503	8,026	\$3,078	\$40,589	10
<b>Hartford</b>	\$5,359,266	10,558,434	117,467,058	1,750	375,894	5,477,781	14,889	306,164	\$2,002,870	\$23,738,076	7,631
<b>Hartland</b>	\$12,516	25,357	259,612	5	0	0	232	4,568	\$4,867	\$57,806	15
<b>Harwinton</b>	\$35,495	51,106	598,715	6	0	0	2,232	43,221	\$15,969	\$246,644	48
<b>Hebron</b>	\$325,375	634,500	7,129,275	116	388	7,152	5,359	110,832	\$118,163	\$1,484,728	371
<b>Kent</b>	\$66,274	106,832	1,405,675	14	0	0	1,984	40,607	\$24,559	\$376,536	78
<b>Killingly</b>	\$649,309	2,338,110	28,660,118	343	9,665	131,853	3,458	70,408	\$383,195	\$4,714,354	1,247
<b>Killingworth</b>	\$126,572	257,362	3,178,566	45	0	0	4,691	90,399	\$58,014	\$828,113	182
<b>Lebanon</b>	\$47,998	68,713	644,686	8	0	0	2,692	51,665	\$21,267	\$301,919	66
<b>Ledyard</b>	\$136,838	468,765	9,073,073	86	1,437	21,564	4,936	101,165	\$93,830	\$1,799,042	302
<b>Lisbon</b>	\$135,971	1,555,262	11,017,311	150	0	0	1,023	19,107	\$244,193	\$1,730,766	774
<b>Litchfield</b>	\$160,160	358,514	3,954,293	65	0	0	4,019	80,072	\$71,193	\$911,068	224
<b>Lyme</b>	\$11,228	16,352	241,838	2	0	0	515	10,533	\$4,256	\$71,312	13
<b>Madison</b>	\$521,604	792,479	8,499,253	107	13,888	271,063	19,153	371,012	\$210,144	\$2,993,397	708
<b>Manchester</b>	\$2,948,346	8,288,292	78,856,864	1,097	160,006	2,336,415	14,726	291,784	\$1,472,396	\$15,097,924	5,212
<b>Mansfield</b>	\$565,617	1,443,217	15,389,285	101	3,152	51,689	12,029	224,236	\$273,606	\$3,257,898	875
<b>Marlborough</b>	\$35,296	46,718	452,460	5	0	0	1,935	35,579	\$14,420	\$199,639	44
<b>Meriden</b>	\$1,044,424	1,689,472	19,687,886	186	45,859	702,172	15,587	290,458	\$362,846	\$4,770,197	1,307
<b>Middlebury</b>	\$216,414	480,130	5,213,256	72	351	6,700	7,674	159,197	\$104,517	\$1,415,693	329
<b>Middlefield</b>	\$100,849	285,618	3,761,840	79	0	0	2,086	34,600	\$52,643	\$707,220	167
<b>Middletown</b>	\$2,137,273	3,618,441	37,585,077	418	121,867	2,194,580	29,258	527,843	\$777,462	\$9,701,825	2,875
<b>Milford</b>	\$1,215,841	5,702,955	56,326,781	581	51,128	1,033,499	14,547	309,019	\$982,922	\$10,649,876	3,291
<b>Monroe</b>	\$926,440	1,234,153	14,588,114	224	77,194	785,765	5,885	119,410	\$277,160	\$3,346,363	1,138
<b>Montville</b>	\$209,914	1,331,070	10,060,816	131	1,313	21,826	3,798	71,606	\$222,181	\$1,824,578	709
<b>Morris</b>	\$27,677	40,361	460,194	4	0	0	1,495	25,663	\$11,835	\$164,190	36
<b>Naugatuck</b>	\$627,923	1,599,027	20,689,106	365	12,178	196,320	9,813	190,303	\$295,934	\$4,038,065	976
<b>New Britain</b>	\$1,573,789	4,948,608	46,190,396	602	54,508	994,530	10,236	199,997	\$851,500	\$8,642,853	2,885
<b>New Canaan</b>	\$357,544	586,499	8,190,727	103	0	0	15,638	315,044	\$149,899	\$2,431,196	464
<b>New Fairfield</b>	\$100,456	158,283	2,004,973	29	0	0	4,726	97,338	\$43,610	\$697,058	138
<b>New Hartford</b>	\$189,726	1,564,132	12,128,286	160	0	0	3,145	61,424	\$254,176	\$2,070,021	805
<b>New Haven</b>	\$2,196,817	5,620,580	59,950,026	594	357,288	5,063,369	36,126	798,062	\$1,311,635	\$16,734,581	5,376
<b>New London</b>	\$968,203	1,703,734	26,180,062	172	33,911	449,845	1,992	42,347	\$299,408	\$4,507,989	1,065
<b>New Milford</b>	\$912,393	2,931,845	33,690,966	314	536	8,039	8,220	169,350	\$486,549	\$5,761,032	1,543
<b>Newington</b>	\$636,306	1,652,569	13,169,197	226	35,041	664,113	9,789	200,731	\$324,322	\$3,386,207	1,148
<b>Newtown</b>	\$883,404	1,429,984	16,375,413	135	50,358	587,785	13,968	274,691	\$317,843	\$4,068,826	1,175
<b>Norfolk</b>	\$15,720	25,074	280,185	3	0	0	1,204	24,163	\$8,813	\$141,277	28
<b>North Branford</b>	\$1,181,067	695,583	7,258,616	78	1,461	24,498	3,101	61,377	\$121,203	\$1,362,565	389
<b>North Canaan</b>	\$5,934	23,482	208,716	2	0	0	0	0	\$3,628	\$31,408	12
<b>North Haven</b>	\$969,825	3,822,942	42,211,773	342	60,793	1,010,321	8,509	180,107	\$675,716	\$7,977,137	2,350
<b>North Stonington</b>	\$47,753	101,813	1,300,837	8	1,868	28,024	1,009	20,791	\$21,282	\$303,114	74
<b>Norwalk</b>	\$2,039,364	13,135,781	110,753,571	1,303	46,368	890,856	21,028	432,250	\$2,149,303	\$19,120,207	6,961
<b>Norwich</b>	\$967,337	2,767,101	28,812,914	295	11,972	227,678	0	0	\$437,384	\$4,535,538	1,427
<b>Old Lyme</b>	\$233,785	596,419	8,420,259	86	0	0	3,274	64,239	\$104,887	\$1,517,314	331
<b>Old Saybrook</b>	\$156,705	623,539	4,900,040	65	1,422	23,941	7,014	137,941	\$123,196	\$1,263,372	388
<b>Orange</b>	\$557,605	2,819,769	24,538,208	275	25,598	549,677	14,145	316,471	\$514,229	\$5,461,341	1,716
<b>Oxford</b>	\$187,659	512,987	6,852,760	136	3,375	76,218	3,486	66,087	\$95,929	\$1,361,703	315
<b>Plainfield</b>	\$119,335	206,506	2,473,294	23	2,291	49,323	3,447	67,812	\$47,822	\$691,994	159
<b>Plainville</b>	\$369,441	1,055,962	9,855,243	102	12,946	231,870	7,196	148,513	\$202,735	\$2,283,765	685
<b>Plymouth</b>	\$96,527	167,286	2,250,836	31	1,829	35,570	2,916	58,070	\$38,905	\$599,924	129

The towns indicated in **green** are Clean Energy Communities.

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Town	Energy Incentives	Annual kWh Savings	Lifetime kWh Savings	Peak Demand kW	Annual CCF Savings	Lifetime CCF Savings	Annual Gallons (Oil & Propane)	Lifetime Gallons (Oil & Propane)	Annual Dollars Saved	Lifetime Dollars Saved	Annual CO <sub>2</sub> (Tons) Saved
Pomfret	\$52,981	35,936	430,842	5	1,770	34,072	1,749	30,644	\$14,123	\$219,538	51
Portland	\$175,679	262,218	3,125,867	32	2,918	52,110	8,726	182,285	\$78,370	\$1,257,262	258
Preston	\$64,251	57,822	893,694	6	0	0	1,688	36,545	\$15,742	\$281,592	50
Prospect	\$146,870	159,133	1,872,046	28	4,062	60,930	4,672	93,231	\$47,021	\$715,875	163
Putnam	\$1,001,198	1,422,187	15,170,453	207	6,578	77,189	14,614	357,426	\$284,902	\$3,811,925	925
Redding	\$92,760	116,683	1,257,070	13	0	0	5,479	114,436	\$40,126	\$651,175	126
Ridgefield	\$640,277	1,920,129	18,173,426	715	3,584	56,824	21,229	441,302	\$385,359	\$4,567,368	1,231
Rocky Hill	\$868,042	3,858,581	44,455,833	205	44,564	738,954	3,165	63,188	\$645,923	\$7,597,291	2,200
Roxbury	\$23,885	31,289	434,622	6	0	0	1,497	31,035	\$10,974	\$192,709	35
Salem	\$21,210	33,358	336,534	3	0	0	815	14,769	\$8,477	\$111,037	27
Salisbury	\$66,017	172,854	2,142,366	42	0	0	878	18,635	\$29,896	\$390,700	94
Scotland	\$2,829	3,555	36,437	0	0	0	189	3,411	\$1,324	\$19,477	4
Seymour	\$187,189	279,328	3,546,463	51	556	10,846	9,892	204,404	\$83,564	\$1,369,687	265
Sharon	\$13,437	17,680	190,553	3	0	0	296	5,749	\$3,756	\$48,500	11
Shelton	\$889,063	2,355,834	29,735,836	254	16,562	330,495	15,223	321,507	\$439,662	\$6,075,704	1,449
Sherman	\$23,329	31,721	286,317	6	0	0	1,393	28,588	\$10,203	\$150,870	31
Simsbury	\$776,112	1,214,282	15,449,530	191	55,680	659,490	15,222	301,284	\$294,057	\$4,103,043	1,117
Somers	\$56,058	105,703	1,112,515	12	0	0	3,563	70,568	\$29,815	\$434,772	92
South Windsor	\$1,400,317	5,344,272	76,857,153	685	115,387	1,676,170	6,030	120,595	\$945,572	\$13,528,238	3,391
Southbury	\$805,185	1,956,638	25,648,684	262	2,337	44,015	11,007	214,867	\$347,548	\$4,744,519	1,105
Southington	\$886,377	4,131,550	38,884,202	505	30,430	564,447	8,500	165,575	\$696,601	\$6,993,073	2,308
Sprague	\$15,670	25,267	301,464	1	0	0	511	9,955	\$6,001	\$86,198	19
Stafford	\$200,561	361,706	5,224,776	48	83	1,660	11,881	250,576	\$103,663	\$1,796,742	327
Stamford	\$3,465,164	9,051,540	110,534,764	1,171	86,365	1,296,446	21,367	447,418	\$1,554,067	\$19,531,896	5,213
Sterling	\$9,112	15,762	163,932	2	0	0	564	10,514	\$4,599	\$64,793	14
Stonington	\$261,701	501,799	5,739,226	101	799	10,786	9,606	196,110	\$116,114	\$1,648,094	367
Stratford	\$802,808	3,534,361	30,499,572	369	97,494	2,123,598	18,076	399,090	\$700,681	\$8,088,668	2,554
Suffield	\$201,507	387,304	4,384,275	46	2,360	41,331	5,520	108,284	\$84,053	\$1,133,525	274
Thomaston	\$773,956	1,579,471	16,843,937	281	45,622	650,907	2,336	48,277	\$291,171	\$3,301,599	1,078
Thompson	\$298,061	158,872	1,911,379	21	0	0	8,255	194,615	\$57,697	\$1,072,259	181
Tolland	\$169,294	300,838	3,282,978	53	0	0	7,229	140,491	\$75,314	\$1,051,527	237
Torrington	\$679,894	2,081,968	22,048,312	271	18,295	296,655	10,086	209,892	\$377,487	\$4,426,679	1,258
Trumbull	\$1,295,802	2,888,211	29,299,905	342	57,094	1,003,439	13,360	279,142	\$547,299	\$6,417,708	1,928
Union	\$2,524	7,524	95,199	1	0	0	135	2,437	\$1,716	\$24,324	5
Vernon	\$825,944	1,257,805	14,690,309	142	46,365	730,726	9,199	178,112	\$269,999	\$3,574,957	1,013
Voluntown	\$42,677	84,011	1,090,860	6	0	0	624	11,696	\$15,506	\$211,883	49
Wallingford	\$1,403,665	4,697,693	34,346,015	555	87,401	958,831	0	0	\$797,978	\$6,009,694	2,828
Warren	\$21,919	35,462	516,472	5	0	0	98	2,457	\$5,882	\$87,797	19
Washington	\$38,187	35,702	388,310	5	0	0	2,365	45,410	\$14,532	\$231,033	44
Waterbury	\$4,088,120	10,768,475	99,702,809	1,145	214,782	3,205,515	39,910	760,903	\$2,004,115	\$20,922,958	7,085
Waterford	\$789,845	5,314,973	50,675,760	564	3,723	58,129	5,702	111,310	\$847,053	\$8,124,027	2,697
Watertown	\$465,225	936,681	11,461,238	143	23,147	308,326	8,426	168,531	\$197,784	\$2,675,251	705
West Hartford	\$2,140,483	5,087,194	42,547,889	738	147,463	2,192,395	16,258	327,497	\$974,385	\$9,667,429	3,592
West Haven	\$793,495	2,365,402	26,542,496	298	123,049	1,630,021	22,308	494,812	\$558,449	\$7,451,124	2,190
Westbrook	\$314,246	709,676	10,216,776	80	163	3,623	2,368	45,314	\$118,423	\$1,706,087	373
Weston	\$134,897	111,161	1,197,072	30	3,539	60,736	8,813	186,983	\$56,242	\$1,000,340	190
Westport	\$577,755	941,110	10,624,145	165	21,975	417,995	23,034	484,975	\$253,619	\$3,856,143	868
Wethersfield	\$1,059,106	1,407,492	15,736,540	212	65,610	1,107,575	6,642	137,072	\$298,711	\$3,898,079	1,170
Willington	\$31,819	43,607	458,267	5	0	0	2,235	44,015	\$15,568	\$243,475	49
Wilton	\$781,124	1,705,739	18,830,401	192	11,127	123,045	23,010	468,868	\$366,504	\$4,853,668	1,199
Winchester	\$213,888	265,625	3,225,539	30	12,206	238,950	1,949	36,752	\$58,994	\$843,702	228
Windham	\$1,270,586	3,539,318	35,693,774	358	99,074	1,253,804	6,092	120,840	\$653,132	\$6,957,251	2,407
Windsor	\$1,262,347	3,107,117	40,009,631	423	143,126	1,715,440	14,313	278,956	\$656,152	\$8,653,942	2,566
Windsor Locks	\$1,400,978	12,096,812	169,545,685	1,237	29,185	255,104	4,611	98,427	\$1,911,871	\$26,140,817	6,161
Wolcott	\$228,774	406,381	4,184,227	67	137	2,370	10,444	196,912	\$103,412	\$1,395,961	323
Woodbridge	\$791,319	459,942	4,473,972	66	3,122	47,775	11,142	241,363	\$119,101	\$1,700,168	388
Woodbury	\$142,314	300,114	3,425,351	50	0	0	4,360	88,685	\$64,136	\$877,661	203
Woodstock	\$104,645	255,263	2,766,454	34	0	0	2,273	43,341	\$48,648	\$592,231	154

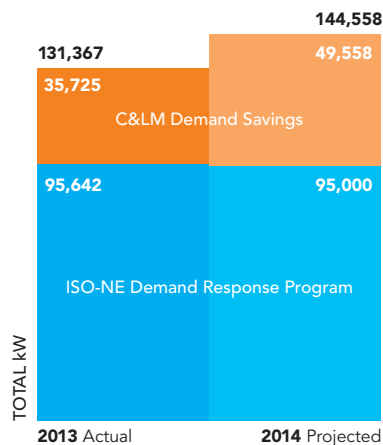
The towns indicated in **green** are Clean Energy Communities.

# 2013 ACTUAL SPENDING / 2014 BUDGET

Conservation and Load Management Programs	2013 Actuals Electric	2014 Plan Electric	2013 Actuals Natural Gas	2014 Plan Natural Gas
<b>RESIDENTIAL</b>				
Residential Retail Products	\$ 8,593,036	\$ 15,000,000	\$ —	\$ —
Residential New Construction	1,605,706	1,800,000	2,163,759	1,568,285
Home Energy Solutions (HVAC, Duct Sealing, Lighting)	19,000,142	14,248,497	5,404,385	13,677,533
Home Energy Solutions Potential Allocation	—	4,109,655	—	—
HES Income Eligible	14,368,996	20,455,509	7,858,100	v 8,940,758
Residential Behavior	—	3,600,000	—	—
Water Heating	—	—	101,482	948,063
<b>Subtotal RESIDENTIAL</b>	<b>\$ 43,567,880</b>	<b>\$ 59,213,660</b>	<b>\$ 15,527,726</b>	<b>\$ 25,134,639</b>
<b>COMMERCIAL &amp; INDUSTRIAL</b>				
Energy Conscious Blueprint	\$ 12,049,991	\$ 13,690,103	\$ 3,026,555	\$ 6,374,415
Energy Opportunities	25,048,033	37,883,962	3,242,397	3,241,000
Business & Energy Sustainability (O&M, RetroCx, BSC)	1,946,623	6,490,000	163,792	1,661,000
Prime	539,815	810,000	—	—
Small Business	15,733,434	22,725,935	725,047	515,000
<b>Subtotal C&amp;I</b>	<b>\$ 55,317,896</b>	<b>\$ 81,600,000</b>	<b>\$ 7,157,791</b>	<b>\$ 11,791,415</b>
<b>OTHER—EDUCATION</b>				
Smart Living Center - Museum Partnerships	\$ 834,904	\$ 2,080,000	\$ —	\$ 520,000
Clean Energy Communities	970,190	1,720,000	27,677	430,000
EE Smarts / K-12 Education	802,465	800,000	—	200,000
Customer Engagement	—	600,000	—	150,000
Science Center	192,414	—	—	—
<b>Subtotal Education</b>	<b>\$ 2,799,973</b>	<b>\$ 5,200,000</b>	<b>\$ 27,677</b>	<b>\$ 1,300,000</b>
<b>OTHER—PROGRAMS / REQUIREMENTS</b>				
Institute for Sustainable Energy (ECSU)	\$ 560,000	\$ 448,000	\$ —	\$ 112,000
ESPC - Project Manager - Lead By Example	41,349	115,200	—	28,800
Residential Loan Program (Including ECLF & CHIF)	575,122	2,283,100	205,069	319,000
C&I Loan Program	156,423	1,780,350	22,240	239,000
C&I Loan Defaults	202,416	140,000	294	239,000
C&I Self Funding	—	5,000,000	—	—
<b>Subtotal Programs/Requirements</b>	<b>\$ 1,535,310</b>	<b>\$ 9,766,650</b>	<b>\$ 227,603</b>	<b>\$ 937,800</b>
<b>OTHER—LOAD MANAGEMENT &amp; RD&amp;D</b>				
ISO Load Response Program	\$ 4,128,416	\$ 3,400,000	\$ —	\$ —
Research, Development & Demonstration	488,058	575,000	165,000	159,000
<b>Subtotal Load Management and RD&amp;D</b>	<b>\$ 4,616,475</b>	<b>\$ 3,975,000</b>	<b>\$ 165,000</b>	<b>\$ 159,000</b>
<b>OTHER—ADMINISTRATIVE &amp; PLANNING</b>				
Administration	\$ 2,886,474	\$ 1,447,512	\$ 230,386	\$ 361,878
Marketing Plan	76,461	2,440,000	8	610,000
Planning and Evaluation	3,803,061	3,911,200	441,821	977,800
Evaluation Consultant	—	200,000	—	50,000
Information Technology	2,183,437	1,600,000	114,724	400,000
Energy Efficiency Board	707,174	580,000	125,376	145,000
Performance Management Fee	8,246,527	8,457,701	1,888,002	2,083,627
<b>Admin/Planning Expenditures</b>	<b>\$ 17,903,134</b>	<b>\$ 18,636,413</b>	<b>\$ 2,800,318</b>	<b>\$ 4,628,305</b>
<b>PROGRAM SUB-TOTALS</b>				
Residential	\$ 46,604,642	\$ 67,768,760	\$ 15,754,944	\$ 27,021,638
C&I	60,261,294	93,403,550	7,185,862	12,640,214
Other	\$ 18,874,732	\$ 17,219,413	\$ 2,965,309	\$ 4,289,305
<b>TOTAL C&amp;LM BUDGET</b>	<b>\$ 125,740,669</b>	<b>\$ 178,391,723</b>	<b>\$ 25,906,115</b>	<b>\$ 43,951,158</b>

## LOAD MANAGEMENT & PEAK DEMAND

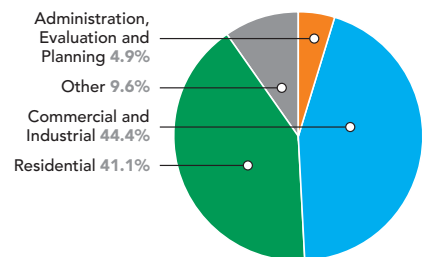
Load management programs reduce peak demand and have direct impact on consumers, as reductions in needed capacity can result in lower electricity prices to the wholesale market (referred to as the Demand-Reduction-Induced Price Effect or DRIPE), and also reduce the federally mandated congestion charges on electric bills.



Peak Demand Savings available from the Energy Efficiency Fund, CMEEC and ISO-New England Programs (in kW)

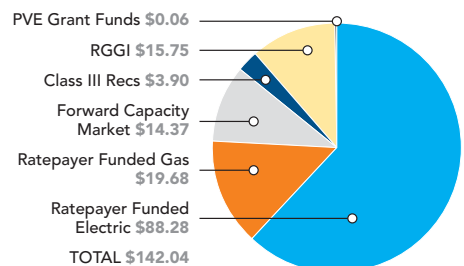
## 2013 EFFICIENCY PROGRAM SPENDING

Energy Efficiency Fund programs are administered to maximize the cost-effectiveness and impacts of energy efficiency and load management activities.



## 2013 EFFICIENCY PROGRAM FUNDING

Funding for energy efficiency programs comes from many sources. Funding reflects 2013 revenues received. (In Millions)



# CONNECTICUT MUNICIPAL ELECTRIC ENERGY COOPERATIVE

## BACKGROUND

The Connecticut Municipal Electric Energy Cooperative (CMEEC), a joint action supply and transmission agency established by the state's municipal electric utilities, is owned by the Cities of Groton and Norwich, the Borough of Jewett City, and South and East Norwalk. In addition, CMEEC provided all power requirements to these participating utilities: Town of Wallingford Department of Public Utilities, Bozrah Light and Power Company, and the Mohegan Tribal Utility Authority. Energy use and costs continue to be of critical importance to all Connecticut residents and businesses. In 2013, CMEEC Member Electric Utilities (MEUs) continued their proactive work and active partnerships with their municipalities, commercial and industrial businesses, residents and limited-income customers. By supporting the energy supply, transmission and distribution needs of all customer sectors, MEUs serve as integrated energy managers helping to reduce and reshape energy use and assisting the entire spectrum of customers to lower energy costs. In 2013, MEUs realized annual savings of 13,693,918 kilowatt-hours. These savings were achieved through the delivery of a full array of efficiency programs. In total, over 21,000 customers participated in the programs.

## CONSERVATION AND LOAD MANAGEMENT

The Municipal Electric Utilities (MEUs) continued delivery of cost effective Conservation and Load Management (C&LM) programs to customers in 2013. The Connecticut Municipal Electric Energy Cooperative (CMEEC), on behalf of the MEUs, worked with the members of the Energy Efficiency Board pursuant to Connecticut General Statutes: Section 7-233y, in implementing additional programs to reduce customer electricity usage and peak demand.

In 2013, the MEUs provided a fully implemented portfolio of energy-efficiency initiatives, including:

- Performing comprehensive energy audits and weatherization of 1,148 homes;
- Distributing 155,115 compact fluorescent lamps, bringing the total to over 1,257,000 since program inception in 2006;
- Promotion/purchase of over 390 ENERGY STAR appliances through the Appliance Rebate Program;

- Participation in the Cool Choice HVAC Rebate program by more than 90 residential and commercial customers;
- Providing energy-efficiency assessments and incentives for over 101 commercial and industrial customer projects (e.g., custom equipment replacement, lighting retrofits) and
- Serving more than 21,000 customers in total.

C&LM efforts during 2013 resulted in a 2.045 MW coincident summer peak demand reduction and 13,693,918 kWh in annual energy savings, at a cost of \$0.024 per lifetime kWh. MEU commercial and industrial customers received over \$1,400,000 in incentives for installing energy efficiency measures in their facilities. Residential customers received over \$2,600,000 in incentives. These efforts will continue through 2014 and beyond.



## 2013 CMEEC PROGRAM HIGHLIGHTS

### CMEEC ASSISTANCE TO CUSTOMERS

(ROUNDED TO \$ THOUSANDS)

This table details the incentives and rebates provided to CMEEC residential, commercial and industrial customers in 2013.

<b>Bozrah Light and Power</b>	63,000
<b>Groton Utilities</b>	1,445,000
<b>Jewett City Department of Public Utilities</b>	74,000
<b>Norwich Public Utilities</b>	959,000
<b>Norwalk Third Taxing District</b>	86,000
<b>South Norwalk Electric and Water</b>	192,000
<b>Wallingford Electric Division</b>	1,220,000
<b>TOTAL ASSISTANCE</b>	<b>\$ 4,039,000</b>

### 2013 CMEEC SUMMARY

Program	Program Budget 2013	Actual Utility Costs 2013	% of Budget Spent	Proj. Annual Savings (kWh)	Annual Energy Savings (kWh)	% of Annual kWh Saved	Lifetime Savings (kWh)	2013 Proj. kW Impact	Actual kW Impact	% of kW Impact Achieved	Summer Peak kW Demand Reduction
<b>Residential</b>											
<b>Home Energy Savings Program</b>	\$ 1,464,000	\$ 723,866	49%	2,171,834	769,790	35%	3,934,352	1,465	504	34%	97
<b>Efficient Products</b>											
<b>Lighting</b>	206,000	552,600	268%	2,094,544	5,011,791	239%	20,113,587	2,546	3,223	127%	518
<b>Appliances</b>	92,000	146,028	159%	36,777	21,176	58%	368,813	33	14	43%	14
<b>Subtotal - Residential</b>	<b>\$ 1,762,000</b>	<b>\$ 1,422,494</b>	<b>81%</b>	<b>4,303,155</b>	<b>5,802,757</b>	<b>135%</b>	<b>24,416,752</b>	<b>4,043</b>	<b>3,741</b>	<b>93%</b>	<b>629</b>
<b>Commercial</b>											
<b>Commercial New Construction</b>	\$ 5,100	\$ 3,624	71%	0	0	0%	0	0	0	0%	0
<b>Prescriptive Equipment Replacement</b>	308,800	920,506	298%	1,699,856	1,545,037	91%	21,424,453	168	546	326%	348
<b>C&amp;I Existing Facility Retrofit</b>	2,329,100	1,669,855	72%	9,261,039	6,339,918	68%	81,379,022	2,129	1,622	76%	1,064
<b>Subtotal - Commercial</b>	<b>\$ 2,643,000</b>	<b>2,593,985</b>	<b>98%</b>	<b>10,960,895</b>	<b>7,884,955</b>	<b>72%</b>	<b>102,803,475</b>	<b>2,297</b>	<b>2,169</b>	<b>94%</b>	<b>1,411</b>
<b>Renewables</b>	300,000	22,296	7%	0	6,207	-	155,175	0	5	0%	5
<b>Total - All Programs</b>	<b>\$ 4,705,000</b>	<b>\$ 4,038,775</b>	<b>86%</b>	<b>15,264,050</b>	<b>13,693,918</b>	<b>90%</b>	<b>127,375,402</b>	<b>6,341</b>	<b>5,915</b>	<b>93%</b>	<b>2,045</b>

Notes: 1. Data for Limited Income Customers is included under the Home Energy Savings Program.  
2. RGGI funds are included under Actual Utility Costs.

### 2013 CMEEC PROGRAM HIGHLIGHTS



**Customers Served**  
21,107



**Energy Savings** (kWh = Electricity)  
kWh Annual: 13.7 Million  
kWh Lifetime: 127.4 Million



**Annual Savings**  
\$2.1 Million



**MMBTUs**  
Annual: 46.7 Thousand  
Lifetime: 435 Thousand



**Lifetime Savings**  
\$19.1 Million



**CO<sub>2</sub> Emissions Reduced**  
10,119 Tons (Annual)

**NO<sub>x</sub> Emissions Reduced**  
2.6 Tons (Annual)

**SO<sub>x</sub> Emissions Reduced**  
4.2 Tons (Annual)

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Empowering you to make  
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Light & Power**  
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## CONNECTICUT ENERGY EFFICIENCY FUND

Activities in 2013 Produced Substantial Economic and Environmental Benefits for Residents, Businesses and Municipalities



### Customers Served

Number of Households Served  
477,340  
Number of Businesses Served  
4,040



### Energy Savings

kWh Annual	CCF Annual	Gallons Annual (Fuel Oil & Propane)
285.8 Million	4.7 Million	1.3 Million
kWh Lifetime	CCF Lifetime	Gallons Lifetime (Fuel Oil & Propane)
3.0 Billion	73.8 Million	27.4 Million



### Air Emissions Reduced

CO <sub>2</sub>	2.3 Million Tons (Lifetime)
SO <sub>x</sub>	1,901 Tons (Lifetime)
NO <sub>x</sub>	3,937 Tons (Lifetime)



### Dollars Saved

Annual	Lifetime
\$53.4 Million	\$630.0 Million



### MMBTUs

Annual	Lifetime
1.6 Million	21.6 Million

The legislation that created the Energy Efficiency Fund and Board is Conn. Gen. Stat. § 16-245m, as amended by P.A. 13-5 § 13 and 13-298 § 16.

The legislation that created the conservation and load management fund for municipal electric companies is Conn. Gen. Stat. § 7-233y.

More information on these laws can be found at [EnergizeCT.com/about/CEEF](http://EnergizeCT.com/about/CEEF)

Energize Connecticut helps you save money and use clean energy. It is an initiative of the Energy Efficiency Fund, the Clean Energy Finance and Investment Authority, the State, and your local electric and gas utilities with funding from a charge on customer energy bills.

### Energy Efficiency Board

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