



Draft Connecticut Electric Conservation Program Study

Summary of Draft Report for Public Hearing
January 22, 2008



GDS Associates, Inc.
Engineers and Consultants



Public Act 07-242, Section 59

- Not later than July 1, 2007, the Connecticut Energy Advisory Board shall conduct a study on the efficacy, innovativeness and customer focus on electric conservation programs. The board shall hold a public hearing on such matters. In the study, the board shall **investigate the options** of (1) selecting a state-wide provider of conservation programs through a competitive process, which shall be open to electric distribution companies, the Connecticut Municipal Electrical Energy Cooperative and other entities; (2) retaining the current delivery system for conservation programs; and (3) having a nonprofit organization provide the conservation programs.
- The board shall submit a report containing its findings to the joint standing committee of the General Assembly having cognizance of matters relating to energy and technology not later than February 1, 2008.



Purpose of the Study

- **Efficacy of electric conservation programs**
- **Innovativeness**
- **Customer focus**
- **Investigate the options for alternative delivery systems**



• Efficacy of Electric Conservation Programs



Figure 1-2: Program Administrator Cost per Lifetime kWh Saved

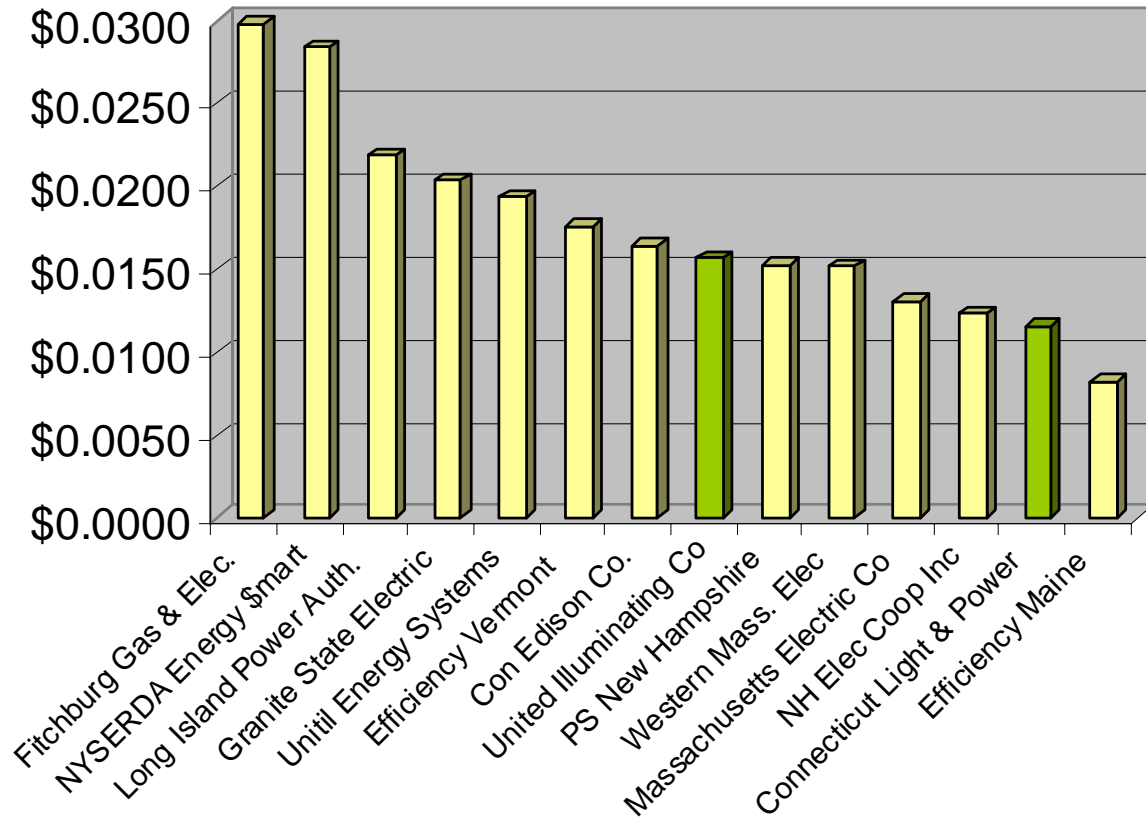


Figure 1-1: EE Program kWh Savings as % of 2006 kWh Sales

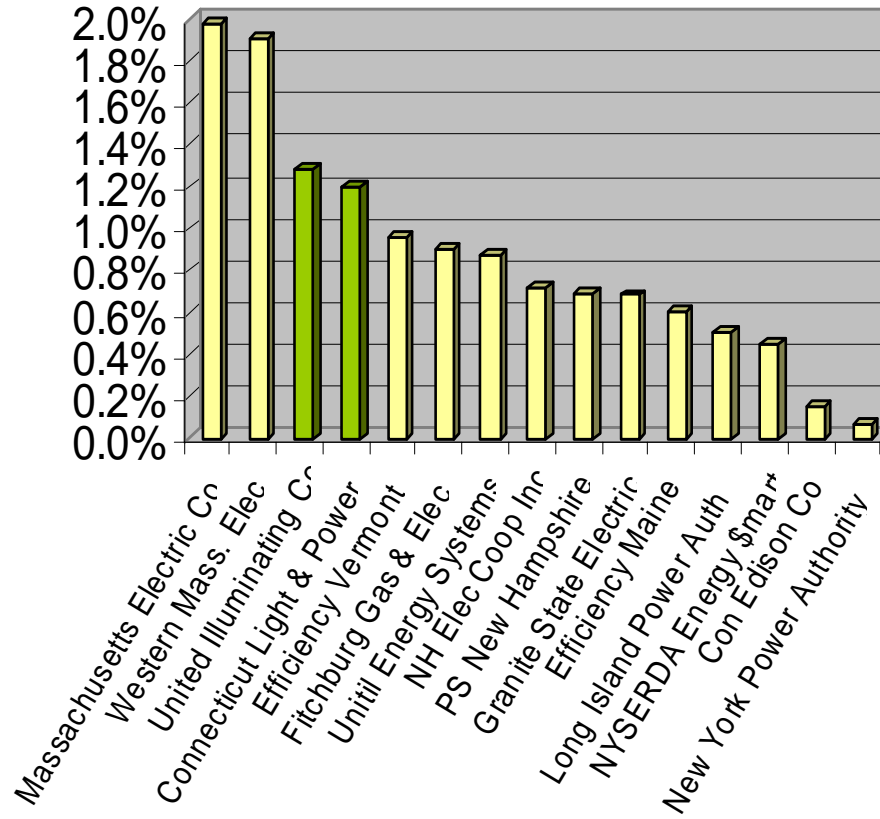
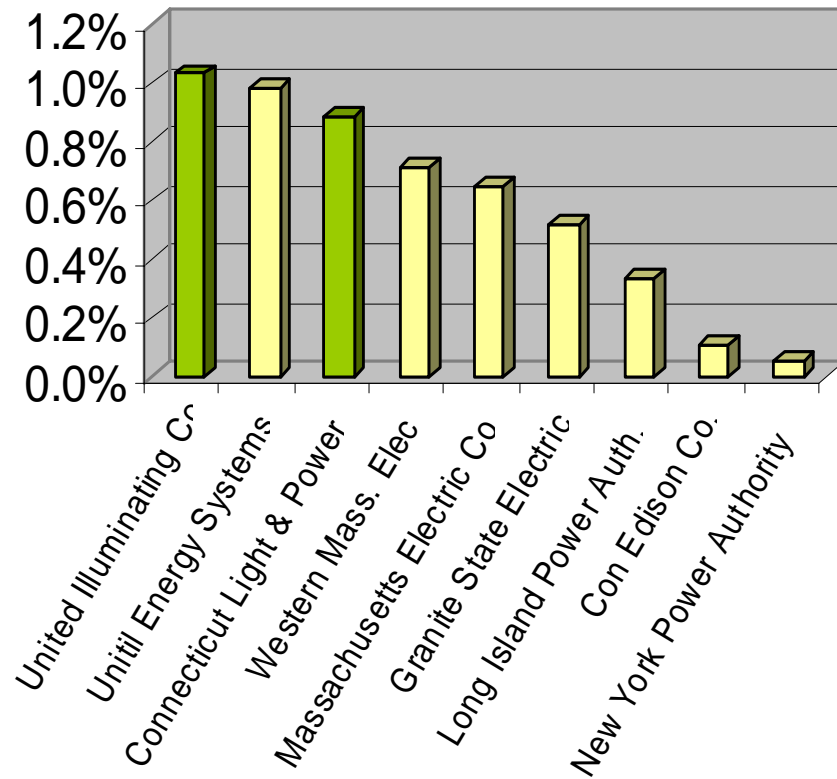


Figure 2-5: 2006 EE Program kW Savings as % of Peak Load



Electricity Savings Exceed Goals

Table 1-1: Savings From CL&P and UI Energy Efficiency Programs in 2005 and 2006

	Goal for Lifetime MWh Savings	Actual Lifetime MWh Savings	% Difference	Source of Goal	Source of Actual Savings
CL&P 2005	2,569,283	3,272,614	27%	CLP Fourth Quarter Report 2005-Final	CL&P Fourth Quarter Report 2005 - Final
CL&P 2006	3,031,605	3,821,941	26%	CLP Quarterly Performance Report Q3, 2006, Attachment 1	CL&P Fourth Quarter Report 2006 - Final
UI 2005	80,125	80,930	1%	Docket 99-10-18 UI CLM 2005 Report	Docket 99-10-18 UI CLM 2005 Report
UI 2006	682,425	786,884	15%	UI Quarterly Performance Report Q3, 2006	UI Fourth Quarter Report 2006 - Final



Innovativeness of Connecticut Electric Conservation Programs



Review of CT Programs

- GDS conducted a review of the CT electric conservation programs
- Compared CT programs to those in all other Northeast states
- Connecticut's portfolio of programs compares very favorably to those in the other Northeast states
 - Measures offered
 - Program strategies
- GDS also examined recent awards made to CT programs

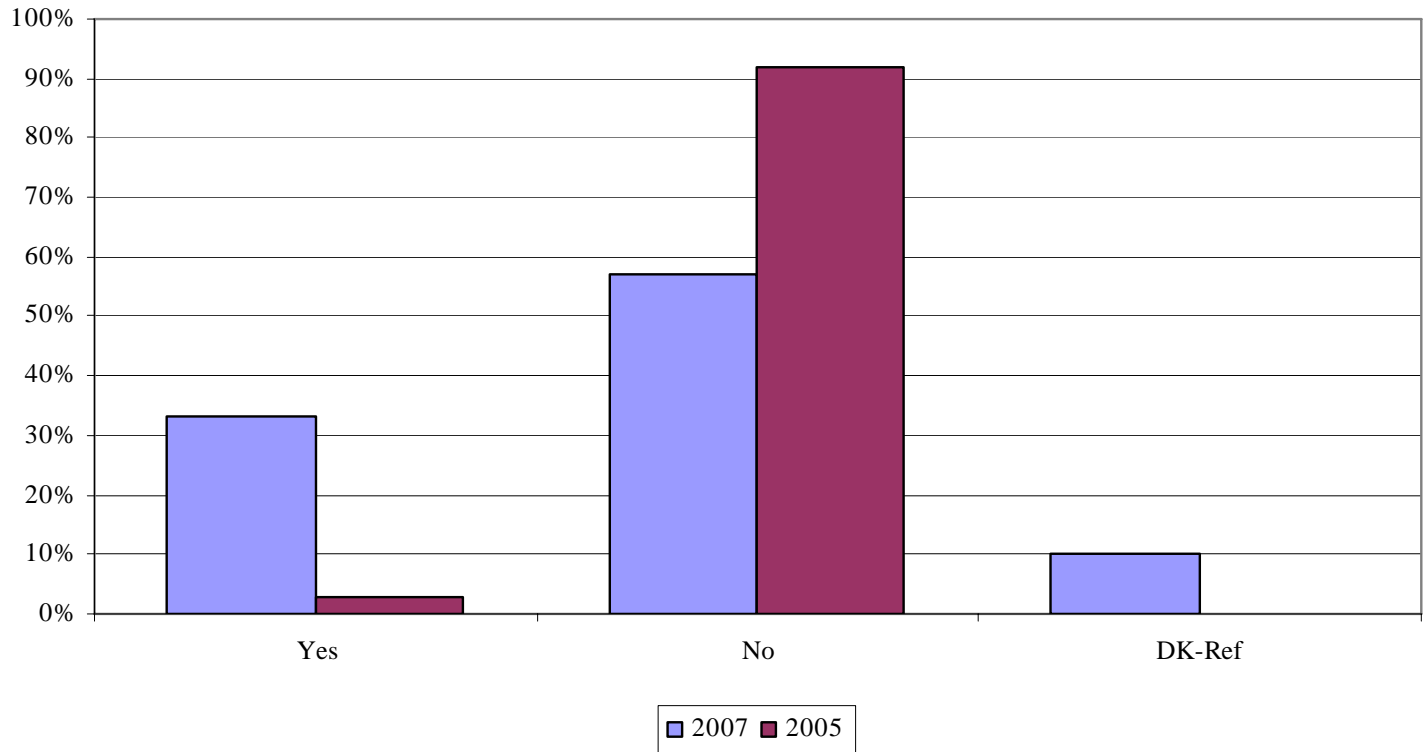


Custom Focus of Electric Conservation Programs

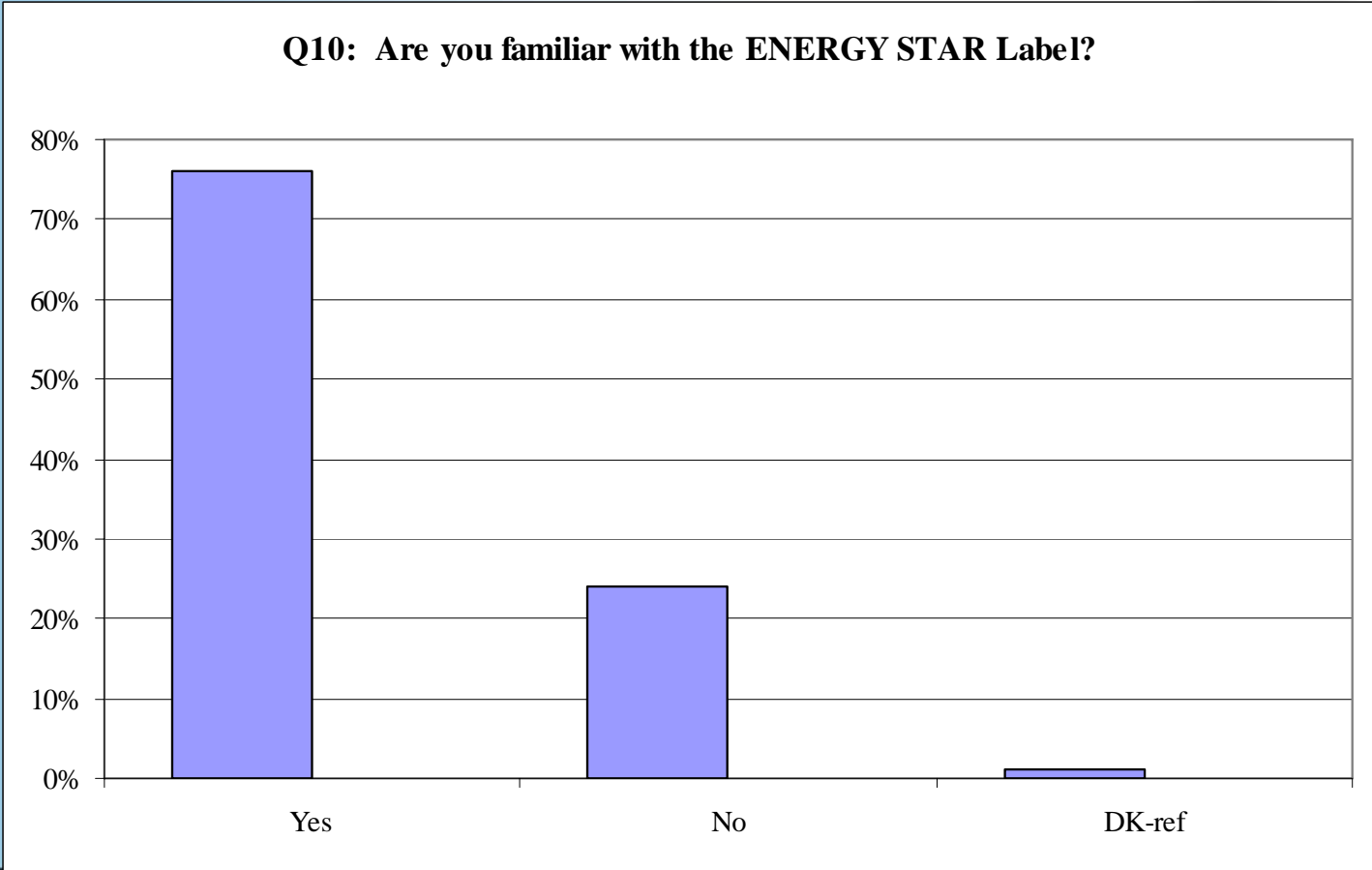


Residential Awareness Survey

Q21: Have you read, heard, or seen any advertising sponsored by the Connecticut Energy Efficiency Fund informing residents about energy conservation and efficiency programs?



Residential Awareness Study

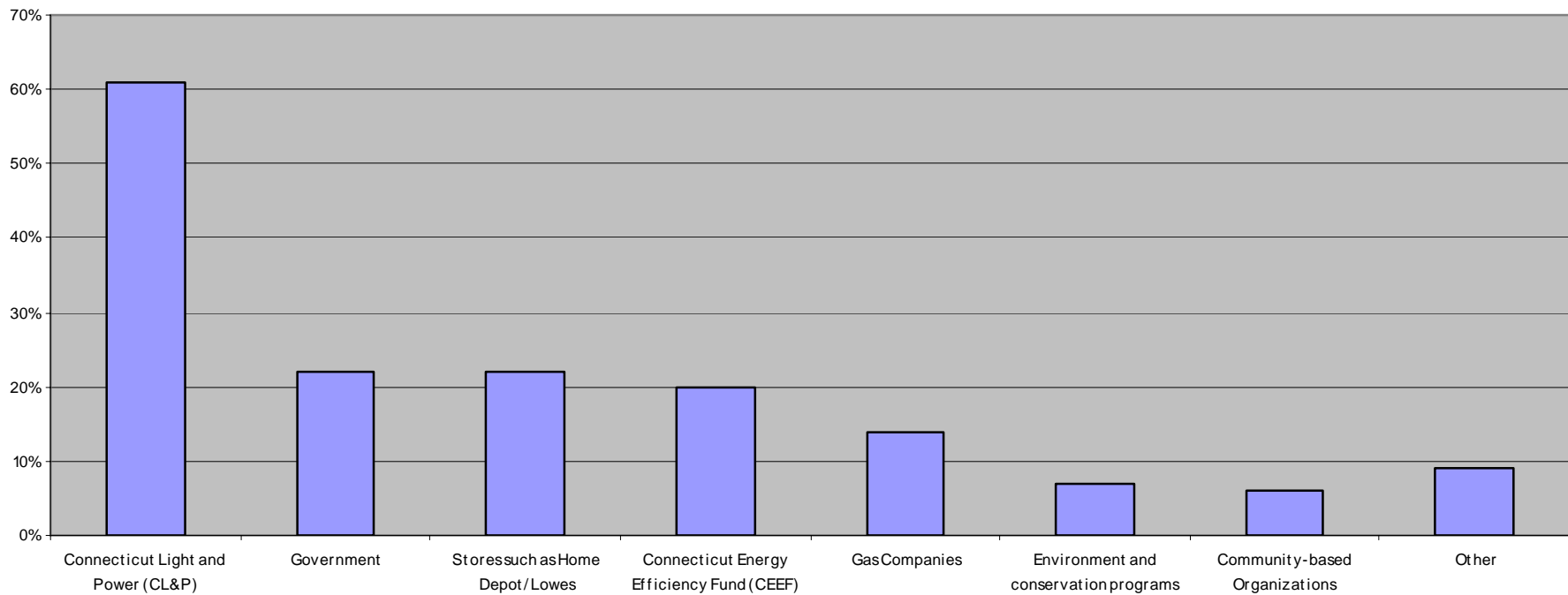


400 customers



Business Awareness Survey

Q8: Indicate any sponsors of energy efficiency programs that you are aware of.

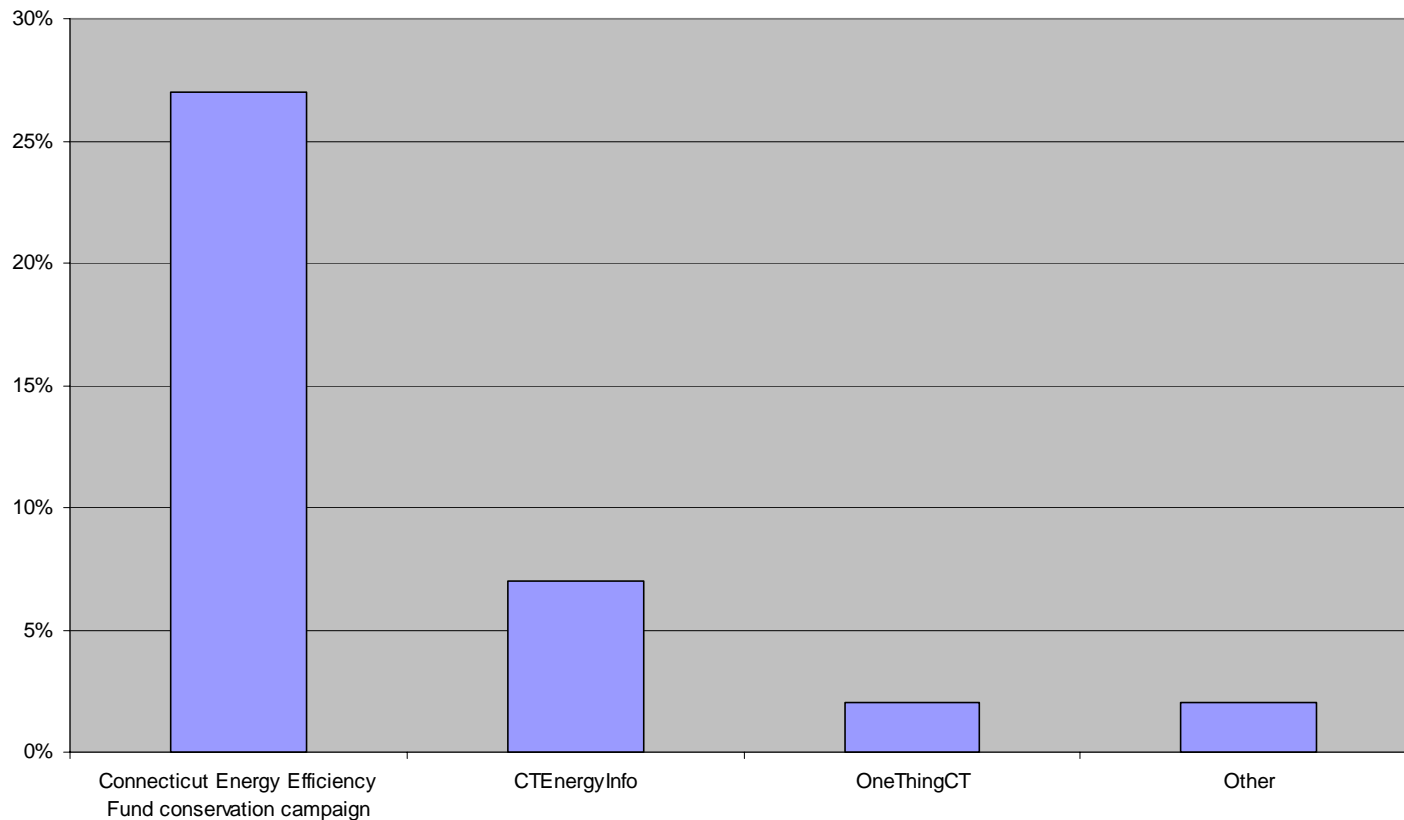


322 CT Businesses



Business Awareness Survey

Q10: Are you familiar with any of the following statewide conservation and efficiency resources?



Investigation of Program Delivery Options



GDS Literature Review Of Program Delivery Options

- Many utilities, such as CL&P and UI, operate highly successful and cost effective energy efficiency programs.
- One feature of program delivery by public benefits organizations is that such organizations can focus on saving energy, and there are no conflicting goals relating to having to sell more energy in order to meet profitability or earning per share objectives.
- Recent policy studies by ACEEE, the Regulatory Assistance Project (RAP), and Lawrence Berkeley Laboratory (LBL) have found that no single administrative structure for energy efficiency programs has emerged in the U.S. that is convincingly superior to all of the other alternatives.



Program Delivery Options

- Funding with systems benefits charge and administration by electric or natural gas utilities
- Funding with systems benefits charge and administration by government agency or another organization
- Funding through electric or gas rates and administration by electric or gas utility
- Funding through electric or gas rates, and utility or independent system operator purchases energy efficiency through RFPs
- Independent administration by a government or other non-utility entity
- A hybrid approach involving government and utilities



Shareholder Incentive Payments

Table 1-2: Summary of Shareholder Incentive Payments to Utilities for Energy Efficiency Programs
New England

State	Year	Basis for Incentive	Incentive Calculation	Latest Annual Incentives
Connecticut	2005	Program savings and other goals	Utilities can earn from 1% to 8%, depending on results	\$4,685,975
Connecticut	2006			\$2,938,110
Maine	n/a	None	None	None
Massachusetts	2006	Multi-factor performance targets (savings, value, performance)	The incentive is up to 9% of program costs before taxes (5.5% after taxes)	\$9,000,000
New Hampshire	2006	Energy savings and cost effectiveness goals	0% to 12% of program budgets	Not available
Rhode Island	2006	Savings and cost effectiveness goals	5.5% of program costs	Not available
Vermont	2006	Multi factor performance targets	About 2% of total contract	\$616,400



Key Findings of Study

- **61% of Connecticut businesses reported they were aware of CL&P energy conservation programs**
- **Residential awareness of electric energy conservation programs in Connecticut has increased significantly since 2005**
- **CL&P and UI do not report actual participant costs for energy efficiency measures in their annual reports. Most other energy conservation program administrators in the Northeast do.**
- **None of the program administration structures examined in this study has proven to be inherently superior to the others**

