

United Illuminating

Homeworks

In 1989, United Illuminating (UI) created the Homeworks program in response to an agreement that came out of New England's collaborative process. The program began in 1990 and was modeled after the Energy Fitness program administered by New England Power Service.

Homeworks is a direct installation program for low income households in some of Connecticut's most economically-depressed communities. The basic approach is to make an intensive pass through a targeted area and to install as many measures to as many customers as possible. To do this UI utilizes a primary contractor and three non-profit agencies to deliver the energy-efficiency measures. Homeworks also hires and trains youths to work on the program from the low-income neighborhoods that are serviced. This not only provides employment for the community but provides a means for the utility to get into areas that are hard to reach. Customer education is also emphasized by the program in regard to the measures received and also other energy-efficiency opportunities within the community.

The program provides a number of energy-efficient measures at no cost to the customer. While compact fluorescent light bulb installation is the primary focus of the program, the utility also provided homeowners with a coil cleaning brush and cleans the refrigerator coils at the time of the visit. (Coil cleaning brushes are no longer part of the program -- see Implementation section.) Whether the customer has an electric hot water heater or gas hot water heater, the contractor wraps the heater, insulates both hot and cold water lines that supply the unit, sets back the water temperature, and installs water-efficient measures including high performance showerheads and kitchen faucet aerators. A key feature of the program is that it effectively integrates the local gas utility into the door to door approach. Kemper Management Services, the program's contractor, performs the services and then bills both United Illuminating and Southern Connecticut Gas Company for the measures installed.

Homeworks provides average annual energy savings of 606 kWh and just under a half a kilowatt of capacity savings per installation, at a cost of approximately \$157 per participant. The gas portion of the program costs \$32 per participant and saves each customer 3.19 MCF or 2.2% of the annual gas bill. Through the end of 1991 the program had accomplished 16,846 installations, or 16.8% of the eligible participants, and has saved 8.09 GWh and 972 kW at a cost of \$2.39 million to United Illuminating. Through the first half of 1992 the program has resulted in cumulative total energy savings of 4.1 GWh and total capacity savings of 604 KW. The program cost for the gas portion of the program to Southern Connecticut Gas Company was \$34,957 in 1991. Oil, gas, and water resources are also saved.

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UNITED ILLUMINATING Homeworks

Sector: Residential

Measures: Compact fluorescent lighting, refrigerator coil cleaning and hot water efficiency measures.

Mechanism: Utility hires a contractor and pays 100% of the cost of the measures' implementation.

History: Program was introduced in June of 1990 and is still in operation.

1991 Program Data

Energy savings:	6,075,000 kWh
Lifecycle energy savings:	49 GWh
Peak capacity savings:	0.74 MW
Cost:	\$1,680,956

6/90 - 6/92 Data

Cumulative energy savings:	23,061,675 kWh
Lifecycle energy savings:	97 GWh
Capacity savings:	1.58 MW
Cost:	\$2,388,956
Participation rate:	23%

The Results Center produced 126 profiles of the most successful energy efficiency and renewable energy programs in the United States and around the world in the early and mid 1990s. With the support of the John D. and Catherine T. MacArthur Foundation, Ted Flanigan directed a research team at Colorado-based IRT Environment to produce and distribute these exceptional examples. Thanks to strong demand for solid case studies, The Results Center was supported by dozens of major utilities and energy associations worldwide. Today, The Results Center is managed again by Ted Flanigan, now at California-based EcoMotion Incorporated, a firm focused on strategic consulting, information dissemination, program design, outreach services, and aggressive implementation. To nominate highly successful programs, contact: The Results Center, c/o EcoMotion, 15375 Barranca Parkway, F-104, Irvine, CA 92618, (949) 450-7155, or TFlanigan@EcoMotion.us