

Taunton Municipal Lighting Plant

Smartlight & Lightwaves

The nation's first compact fluorescent lamp leasing program was pioneered in Taunton, Massachusetts in 1988 and named Smartlight. The Taunton Municipal Lighting Plant (TMLP) had an innovative idea: To lease energy-efficient compact fluorescent lamps to customers for 20 cents per month, thus overcoming high customer purchase costs, the number one obstacle to the purchase of energy-efficient equipment. For the utility, leasing lamps delays the need for any additional generating capacity and provides customers with a value-added service, or what now has become known as energy services.

Taunton launched the Smartlight program in 1988 for residential customers, and then in 1989, after proving the value of Smartlight, launched a parallel and far more aggressive component for its commercial and industrial sectors called Lightwaves. Lightwaves participants pay a fee of 10-40¢/month per lighting fixture for five years to cover approximately 25% of the gross program cost.

Since both programs were truly revolutionary and in some ways ahead of their time, Taunton had to shoulder the task of educating its customers about advances in energy-efficient lighting at the same time that it was recruiting participants for the program. A direct mailer was effectively used for Smartlight. The tri-fold mailer included an actual size cutout of a Philips SL*18 compact fluorescent lamp (CFL) which allowed customers to make sure that the rather large CFLs fit in desired sockets. It also presented the economics of replacing incandescents with CFLs in simple terms.

For its commercial and industrial customers, Taunton offers a turnkey service -- from audits, to personalized consultation, to no up-front cost installations backed by the utility. Taunton also offers Lightwaves participants a public relations program which alerts local and regional media to the energy conservation efforts of program participants. Taunton portrays program participants as vital, contributing "corporate citizens," helping to keep the community's energy costs low.

To date, the Smartlight program has accounted for total annual energy savings of 322.36 MWh. In terms of total cumulative energy savings the program has accrued 1,310.93 MWh as of December 1992. The 121 completed jobs through the Lightwaves program have accounted for cumulative energy savings of 6,967.74 MWh and peak coincident demand savings of 2.2 MW.

Since its inception in 1988 the Smartlight program has cost a total of \$140,530 minus Smartlight income of \$43,890 for a net total program cost of \$96,640. Taunton has spent a gross of \$1,997,850 on the 121 Lightwaves projects that have been completed. The projected income from the measures installed through Lightwaves as of December 1992, is \$574,140, or 29% of the program's costs including equipment.

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TAUNTON MUNICIPAL LIGHTING PLANT Smartlight & Lightwaves

Sector: Smartlight: Residential;
Lightwaves: Commercial/Industrial

Measures: Compact fluorescent lamps, fluorescent & HID lamps, fixtures, ballasts, and reflectors.

Mechanism: Taunton supplies and installs energy-efficient lighting measures in return for lease payments.

History: Smartlight began in 1988; ramped down after first year success. Lightwaves began in 1989 as complement to Smartlight.

1992 Smartlight Data

Energy savings: 0.039 GWh
Lifecycle energy savings: 0.310 GWh
Winter peak capacity savings: 0.006 MW
Net program cost: \$11,330

Cumulative Data (Smartlight & Lightwaves) (1988-1992)

Energy savings: 8.3 GWh
Lifecycle energy savings: 86.1 GWh
Winter peak capacity savings: 2.3 MW
Net program costs: \$1,520,300

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