



Case Study: Eliot Church of Newton (UCC), Newton MA



First established in the year 1845, Eliot Church of Newton, UCC now occupies its fourth building. The current building was constructed in 1957 after a fire destroyed the prior stone church. A charter member of MA Interfaith Power & Light, Eliot has implemented a full range of energy efficiency improvements beginning in 2003 and culminating in 2009 with the installation of a 92% efficient gas-fired hydronic heating system to replace an oil-fired system.

The net results of all the improvements? **Eliot has reduced its carbon dioxide emissions by 55%.** Eliot has **also lowered its utility costs by 41%** during the most recent 12-month period even though the preceding 12 months were colder. (There were 4,371 “heating degree days” during the period Oct. 2009 through September 2010, compared to 4,292 in the prior

year.) Energy costs were \$10,696.96 compared to \$18,233.42 in the preceding 12-month period.

Here’s how Eliot did it:

- ❖ Members held a community **work day** and cleaned radiators & sealed fireplace & other openings;
- ❖ **Programmable thermostats** were installed in 2003 with a **new zone valve for 5 zones**, resulting in a **24% reduction in carbon dioxide emissions**;
- ❖ An **insulating blanket and timer** were installed on the domestic hot water heater in 2005;
- ❖ **Insulation and high-efficiency fluorescent lighting** was installed in 2006;
- ❖ A **92% efficient gas-fired hydronic heating system** replaced the oil-fired system in 2009; and
- ❖ Reminders were placed on light switches and a concerted effort was made to **turn off lights and appliances when not in use!**



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