



For Immediate Release

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Brookline Area Congregation Wins National Award for Exemplary Energy Savings

Washington, DC_ One of Brookline's congregations is among an elite group of small organizations across the country that have won a national environmental award for being energy efficient. **All Saints Parish** won the 2003 Energy Star® for Small Business Award, presented by the U.S. Environmental Protection Agency (EPA), recognizing small businesses for **preventing pollution at a profit.**

All Saints Parish of Brookline, MA, is practicing stewardship of the earth's resources while saving nearly \$5,000 a year on its utility bills, despite an increase in operating hours. In addition to religious worship, the congregation uses its space for daycare, public assemblies, and educational activities. **All Saints** frequently participates with other religious organizations and groups, and is a member of the Massachusetts Interfaith Power and Light (MIP&L). MIP&L is a non-profit initiative that helps Massachusetts congregations of every religious tradition reduce energy consumption, lower operating costs, and promote non-polluting, renewable energy in houses of worship and related buildings. (See web site: www.MIPandL.org)

To increase the energy efficiency of their facility, **All Saints** installed a relatively comprehensive upgrade. First, their local utility company NStar provided an energy audit and installed energy-efficient replacement fixtures including T-8 fluorescent lamps with electronic ballasts. The Congregation replaced their 30-year-old steam boiler with a high-efficiency gas-fired condensing mode hot-water boiler and hydronic-heating system. They also replaced all of their steam radiators with more efficient units designed for hot water systems. The system was then divided into nine heating zones, each with its own in-space programmable thermostat and a central digital controller for the heating plant. The Congregation's staff has also initiated utility purchasing strategies to reduce natural gas costs, and is purchasing green power generated from 100 percent renewable resources. **All Saints** has received public recognition from the Boston Globe and the "Green Energy Congregation Award" from Massachusetts Interfaith Power & Light. Their combined effort has resulted in gas savings of 6,800 therms, and is preventing nearly 79,000 pounds of carbon dioxide (CO₂) pollution per year. Laura Vennard, Senior Warden and The Rev. David Killian, Rector of **All Saints** encourage other congregations to implement energy-efficiency practices.

"We have learned that you can do well by doing good since upgrades save money while they save the earth. We are especially proud of being the first "All Green" congregation in Massachusetts with our 100% purchase of green power," said Vennard. "We hope other congregations will see the long-term financial wisdom of energy efficiency ... and will begin to make their energy decisions in light of their faith," added Rev. Killian.

Award applicants were judged on comprehensiveness of upgrades, cost savings per square foot, creativity, and innovation. Jerry Lawson, national manager ENERGY STAR for Small Business said, "We were impressed with the quality of applications meeting the more rigorous criteria this year. For the first time, we required that applicants submit utility usage data for both one year prior to the upgrades and one year afterwards. This new requirement may have prevented some deserving small businesses from applying, but those who did found their local utility readily provided this data by email or fax. So, the small business did not have to sort through 24 monthly utility bills and the new documentation of actual energy savings has stimulated a good deal of

interest from utility companies to actively promote the Energy Star Small Business Awards to their customers in 2004.” Lawson added.

Energy Star for Small Business Award applications are accepted throughout the year. The application is available online at www.energystar.gov/smallbiz. Deadline for submitting applications is Earth Day, April 22.

Energy Star is a voluntary program of the U.S. Environmental Protection Agency that helps building owners and operators cut energy waste and prevent pollution through energy efficiency. For information call 1-888-STAR YES or visit www.energystar.gov/smallbiz.

Media kits and individual success stories are available online at www.epa.gov/smallbiz or call (202) 564-1353.

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EPA award winners at ceremony at Boston’s Faneuil Hall on Earth Day, 2004. Representing All Saints Parish were Charles Rigg, Property Committee Chair (5th from right) and Chuck McVinney, Junior Warden (4th from right).

Massachusetts Interfaith Power & Light

Case Study: All Saints Episcopal Church, Brookline, MA



All Saints Parish undertook a comprehensive environmental stewardship effort, with new heat generation, new distribution, new controls, and improved lighting. By reducing its gas consumption, All Saints will save approximately \$17,000, with significant reductions in pollutants both on- and off-site. All Saints has used a small part (about 14%, or \$2,400) of this savings to purchase 100% renewable electricity, further reducing pollution from their buildings. Specifically:

These are the major energy conservation *capital* actions...

- **Heating** — On demise of the 30-year-old steam boiler, a high efficiency (90+%) gas-fired hot water boiler was installed. All steam radiators were removed. Highly efficient hot water radiation was installed together with new well-insulated distribution piping. Nine new heating zones were created, each with an in-space programmable thermostat.

A central digital controller was installed for master control of the heating plant.

- **Storm Windows** — Plexiglas interior storm windows have been installed. The Parish purchased the plexiglas cut-to-fix, velcro and other materials. Parishioners did the installation, which is saving about 75% of the quoted contractor cost.
- **Electric Fixtures and Lamping** — NStar completed an audit, and installed energy efficient replacement fixtures and lamping, including ballasts.

These are the major energy conservation *management* actions...

- **Heating** — Each heating zone can be set for 4 changes on each of the 7 days of the week. The typical weekly activities for each space are programmed, with special uses accommodated by a manual reset. All thermostats are programmed for night set-back to 58 F, so that even if a user overrides the normal setting and forgets to set back, efficiency objectives are met. The zoning also permits variation in call temperatures based on solar gain for spaces, as some portions of the building have a significant southern exposure.
- **Electricity** — By Vestry vote, the Parish purchases 100% of its electricity as renewable resource generated. Aggressive management of switches and equipment to be sure equipment is turned off when not needed. Motion-detection or timer switches are installed in infrequently used spaces, such as the basement.
- **Fuel** — A three-year bulk-purchase contract is in place with a well-head gas supplier, reducing the cost of the gas itself by at least 10% as compared to KeySpan retail prices.

These are the outcomes...

- **Heating** — 34% reduction in consumption between the last full year of the old steam system and the first full year of efficient operations. Rebates totaling about \$4700 were received because of the energy efficient equipment.
- **Comfort** — Each space is warm when needed. With the improved insulation from the storm windows, the spaces also "feel" more comfortable. KeySpan rebated about \$700 for the storm window installation.
- **Electricity** — There is a 4+% reduction in electricity use comparing the last quarter of 2001 (initial period of efficient fixtures) to the last quarter of 2000.

This is the Environmental impact...

By *reducing gas consumption* from 22160 to 14170 therms, All Saints saves approximately \$17,000. Also:

- CO₂: 118 lbs/btu emission offsets (94,000 lbs). **Reduces global warming**
- NO_x: .0006 lbs/btu emission offsets (.5 lbs). **Reduces smog**
- SO₂: .0922 lbs/btu emission offsets (74 lbs). **Reduces acid rain**

Simply by *purchasing 100% renewable electricity* for the church buildings and rectory (for a cost of approximately \$2,400), All Saints Parish will significantly reduce pollution sent into the environment. Specifically:

- Carbon Dioxide (CO₂): 1.48 lbs/kwh emission offsets (112,999 lbs). **Reduces global warming**
- Nitrogen Oxide (NO_x): .0019 lbs/kwh emission offsets (145 lbs). **Reduces smog**
- Sulfur Dioxide (SO₂): .0093 lbs/kwh emission offsets (708 lbs). **Reduces acid rain**

Even after purchasing renewable electricity, the net savings for All Saints is approximately \$14,600!

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