# Newsletter 86 Spring 2003

## Visit Our Website

For more information about our services and literature, visit www.interfaithenergy.com

## Our Prayer for Prints

In estimating the cost to do an energy survey, one factor is whether the congregation has blueprints of their buildings because blueprints save time. If they exist, we can see the original design intent of the architects and engineers. Prints tell us what is supposed to be inside the walls, the original heating zones, pipes, wires, ducts, shafts and building dimensions.

There are several types of prints. Plans are drawn as if looking down at the building. Sections are drawn as if the building were vertically sliced apart along a specific line. Elevations show the vertical surfaces of the building, and detail drawings are larger scale drawings of specific decorative or structural parts.

With each addition or major renovation, another set of prints may become part of the congregation's legacy. Yet, upon arrival, we may open a box of blueprints to see shards of paper pour out of their containers like thin, brittle crackers. We frequently find torn, faded or indications of missing sheets.

How valuable are they? To re-create them may cost $5,000 to $50,000 depending on how large and complex the building is, according to Bruce Laverty of the Philadelphia Athenaeum, of which he the curator. Their website is www.philadelphiabuildings.org. A search by the word "church" revealed 3,106 files because the Athenaeum stores prints of religious buildings **without charge**, and will reproduce a set of its prints for an archived congregation on request – also without charge.

These days, designers are likely to use computers to design buildings. Records are therefore stored in magnetic memory on disks, drives or tape. Blueprints of historic buildings, however, are like valuable artwork. They were hand-drawn by skilled draftsmen, long before computers were invented.

The value of blueprints increases with their age, but as they get older and more valuable, they deteriorate. To preserve prints, a congregation could catalog them and buy special cabinets to protect them from light, fire, dirt, excessive humidity and dryness. They should be stored flat, rather than rolled up. Blueprints can also be copied onto high quality, acid-free paper, or microfilmed. While high quality paper may last 500 years, microfilm lasts only 100.

Badly deteriorated blueprints may be rejuvenated with the application of special liquids and then mounted between layers of Mylar polyester. Or prints can be mounted on linen. Neither of these is cheap or permanent. Lost blueprints can also be re-created by measuring everything in the building and re-drawing the set of prints.

Yet, with all these choices, we think that all congregations in the Philadelphia area should give their blueprints to the Athenaeum. Here are our reasons:

Blueprints are very valuable. A set of blueprints reveals information about the insides of buildings not as easily available from any other source. You would have to rip into walls, crawl through tunnels, climb into towers and trace individual wires, pipes, and ducts. The buried and therefore invisible services to the building are also documented on blueprints. You would have to dig up the ground around the building to uncover the water piping, wiring conduit and sewers to determine what has already been drawn on papers that have been misplaced, discarded, burned in a fire or loaned to some forgetful person.

Blueprints are very temporary documents. Exposing them to light for even a few hours reduces their readability. We have NEVER seen a congregation that cares for their blueprints in relation to their value. The Athenaeum stores blueprints in a carefully protected manner.

The oversight or management of congregation blueprints changes as people change roles. The Athenaeum role in protecting blueprints does not change. As much as possible, their collection is permanent – and permanently accessible, even when all blueprints have disappeared from congregation facilities and memory.

For more information, call the Philadelphia Athenaeum's Bruce Laverty at 215-925-2688.

## Appliance Repair Help

The Internet continues to bring our attention to new services. We just learned of www.repairclinic.com that can help you find parts to repair appliances and will provide advice on doing the repairs.

## Green Electricity

Main Interfaith Power and Light has been promoting electricity generated from renewable sources, such as wind, sun, landfills gas and low-impact hydroelectric dams. In their first month of operation last January, about 300 accounts switched to their green power. This represents about 275,000 kilowatthours of electricity.

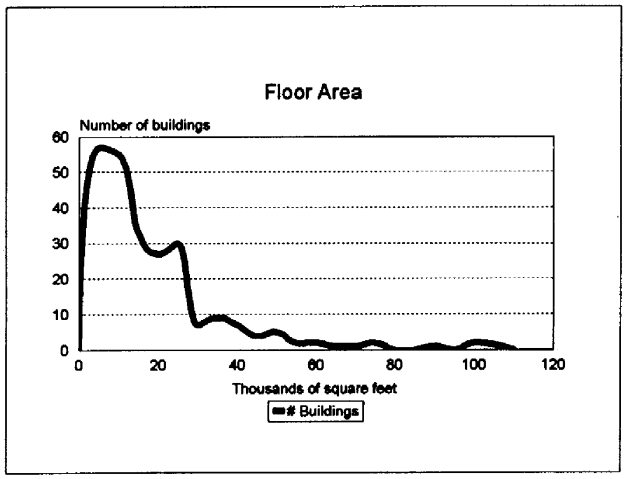
The January 23, 2003 issue of the *Christian Science Monitor* also printed a story about Massachusetts Interfaith Power and Light, plus listed many congregations who are reducing their energy use.

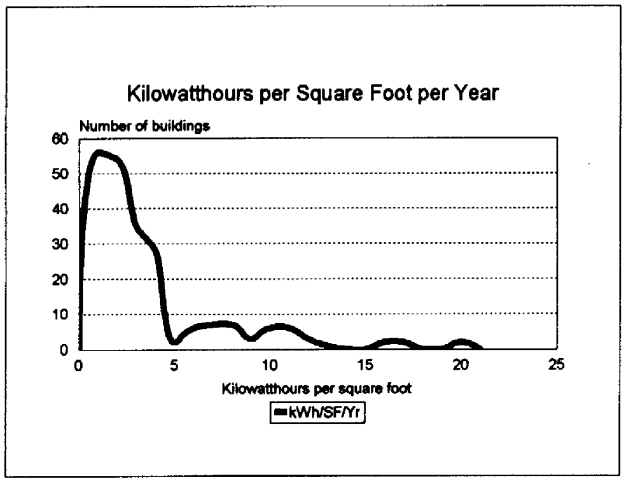
## National Energy Averages for Buildings Used for Worship

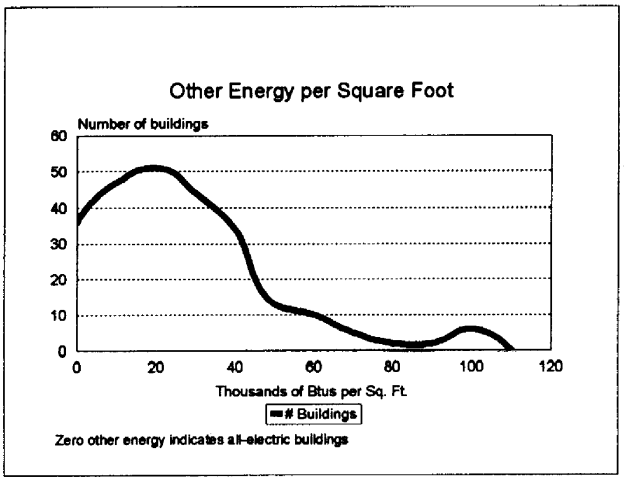
Every few years, the US Department of Energy collects energy data on various types of commercial buildings across the Country, including religious buildings. With the help of Mike MacDonald of Oak Ridge Labs, we have organized the data into three graphs.

So, from these three graphs, we can estimate that the average building used for religious worship in the United States has about 7,000 square feet and uses 2 kilowatthours of electricity per square foot per year.

Energy other than electricity includes natural gas, fuel oil and propane. The average religious worship building uses about 19,000 Btus per square foot each year. This is equivalent to about 0.18 CCF of gas or 0.14 gallons of fuel oil. The average for all forms of energy per year is about 39,000 Btus per square foot per year.



## From ICE enthusiasts:

The purpose of this letter is to let you know that Trinity Reformed Church recently completed the renovation of its heating system from steam to hot water. For the most part we accepted the recommendations given in your June 2001 report…. We are very pleased with the results and want to thank the Interfaith Coalition on Energy for your independent evaluation and recommendations.

Don Vernier, Chair – Property Committee
*Fred Schuetz*, Chair – Heating System Subcommittee

Please accept this donation from the New Life Presbyterian Church. We have benefited greatly from your newsletter, *Comfort & Light*. Thanks!

Carol Giffi, Building Committee

I read your publication every time it arrives. Thanks for the good work. Blessings.

*Pastor Kris Newman*, First Assembly of God

The enclosed check is a contribution toward the newsletters for next year. Based on the helpful information in Comfort and Light, I almost ordered a "Watts Up" energy meter, and was debating how to elaborate to go in the feature of the two models. Then, your most recent newsletter came with information on "Kill-a-Watt" and it became clear that this bare-bones meter will serve our needs quite well. I've got one measuring the electrical usage on an antique chest freezer that a local church is using for a food bank – the results will be fascinating! Thanks for ongoing stream of product information. Blessings on your good work in the year to come.

Shalom,
Peter Sawtell
Executive Director of Eco-Justice Ministries"

Thank you for answering my questions and sending the massive amount of information in the mail. It was very helpful! Your organization is quite impressive.

*Prema Kesselman*