



## SummerHouse Case Study

Over potluck supper, residents of SummerHouse, a 72 unit senior living facility in Shoreview, Minnesota, owned and operated by Presbyterian Homes, offered up stories and advice on how they had made their apartments more energy efficient. Metro CERT's hosted an energy contest and two workshops at the request of its affiliate The Shoreview Sierra Club Green Community. The leadership and enthusiasm shown by Resident Betty Schaefer and the cooperation and follow-through by the Property Manager Bill Callen were key to the SummerHouse project's success.

### Background

Excitement for energy efficiency at SummerHouse is not without precedent in the Shoreview Community. The Shoreview Sierra Club Green Community has been active at the grassroots level for a number of years, connecting the community to environmental resources, which reduce fossil fuel reliance, expand recycling options and promote renewable energy, just to name a few.

- Refrigerator energy use/condition of coils
- Lighting options
- Appliance efficiency
- Standby or phantom load
- Thermostats, if they could be set back at night
- Air leaks, if plastic could be applied over windows.

### Initial Workshop

On January 28, 2009, Metro CERT's held a workshop at SummerHouse, going over energy-saving techniques and demonstrating CFL options, and proposed a "Beat Betty" energy contest for the month of February. Each participant received a free CFL (60 watt equivalent) and a canvas bag.

There was, at first, hesitation among neighbors to participate in a competition and to release energy meter account information. With the help of Betty and Bill, eight residents were recruited for the energy contest and five to participate in a lighting survey.



Property Manager Bill Callen replaced bulbs in the common areas with CFLs.

### Project Planning

Property Manager Bill Callen and Resident Betty Schaefer, also a Shoreview Sierra Club Green Community member, took Metro CERT's through SummerHouse on an initial site visit.

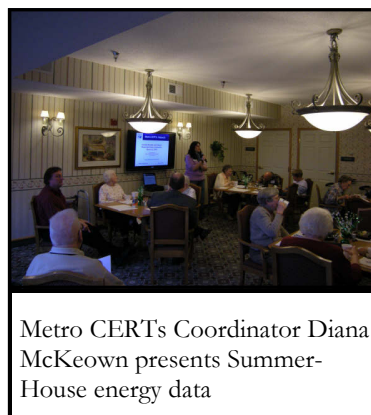
Opportunities for energy savings were identified after a careful review of the following:

#### Common Areas

- Furnace, efficiency rating and filter inspection
- Energy costs for electricity, gas and water
- Lighting Options, where there could be replacements with compact fluorescent lights (CFLs) and other options for the underground parking
- Temperature setting of water heater

#### Individual Apartments

- Furnace efficiency
- Flow rating for faucets and showerheads



Metro CERT's Coordinator Diana McKeown presents SummerHouse energy data

Metro CERT's modified the energy contest to "Beat Yourself" to account for differences among units. The contest would compare each participant's energy use in February 2009 to that of February 2008. The data was "weather corrected" (February 2009 was 17% colder than

February 2008). CERTs also responded to residents' questions on CFLs by demonstrating the broad range of CFL bulbs available on the market today in a lighting display brought for residents to see at the March potluck.



Representative Paul Gardner poses with SummerHouse Resident Betty Schaefer at the March energy efficiency potluck.

### Results

At the March potluck, Metro CERTs gave awards to winners for best electrical and gas savings. SummerHouse residents were joined

by their representative Paul Gardner as well as members of the Shoreview Sierra Club Green Community.

**Gas Savings:** While on average gas use went up 2%, Resident Natalie Holle, a former teacher, who moved to SummerHouse to be close to her kids, was able to save 26% on her monthly gas bill. With a unit on the north side of the building, Natalie's leaky windows and doors made her apartment uncomfortably cool and kept her gas costs high in the winter. Natalie gave all of the credit to her son's excellent job installing a window insulation kit on her patio door, which she believes was the major source of heat loss in her unit. She joked, "I gave my son the prize because he spent the time and money on the shrink wrapping."

**Electrical Savings:** Average electricity use went down 11% at SummerHouse, although Resident Lesta Barber achieved an individual electrical savings of 32%. Lesta shared that even though she had been on vacation, she had changed several of her lighting fixtures to CFLs and had turned off appliances when not in use.

**Common Area Energy Savings:** When asked what had changed at SummerHouse between February 2008 and Feb 2009 at SummerHouse, Property Manager Bill Callen provided a laundry list of energy efficiency measures that he had undertaken to cut

costs and to support the residents interested in energy conservation, "We started by turning down all of the thermostats and replacing incandescents with CFLs. My engineer even found a special adaptor for intermediate bulb sizes, for which we could not easily find a fluorescent equivalent."

Bill now keeps a stash of CFLs and adaptors available on demand for his tenants. He commented in the follow-up interview, "I would certainly recommend the steps taken at SummerHouse to any other senior living home. We're looking into the future now at installing occupancy sensors on the lights and fans in the trash rooms and bathrooms."

### Lessons Learned

- CFLs and plastic film were celebrated factors in the energy savings between February 2008 and 2009.
- CERTs reported that it could have used more time to introduce the competition, to recruit members and to get energy releases.
- "Champions," like Betty Schaefer and Bill Callen were critical in motivating other residents to fully participate in this energy workshop.
- The educational workshop even had an impact on reducing the energy use of those residents who did not participate in the contest. While this was reported anecdotally back to Metro CERTs, these ancillary savings have yet to be quantified.



Green Institute and CERTs' Nancy Kelly poses with Winners Natalie Holle and Lesta Barber the winners from the "Beat Yourself" energy efficiency contest