



Empowering you to make smart energy choices

# HOME ENERGY SOLUTIONS<sup>SM</sup> INCOME ELIGIBLE

ENERGY EFFICIENCY CASE STUDY: FRANCIS LAUDANO AND CHERYL FELLNOR

The Home Energy Solutions-Income Eligible program (HES-IE) is a free service for renters and homeowners who meet our published income guidelines. Specialists will perform a variety of services to make your home weather tight; they will replace incandescent lighting with efficient compact fluorescent lighting, and some households may qualify for insulation and energy-efficient appliances, including refrigerators. This program is one of several innovative solutions offered by Energize Connecticut and administered by Connecticut's utility companies.

To find energy solutions for your home, call 877-WISE-USE (877-947-3873) or visit EnergizeCT.com

# Energize Connecticut and Eversource helped the Laudano family:

- Save electricity:
  - 1,762 kilowatt-hours (annually)
  - 8,948 kilowatt-hours (lifetime)
- Save water:
  - 6,492 gallons (annually)
  - 32,460 gallons (lifetime)
- Save fuel oil:
  - 25 gallons (annually)
  - 504 gallons (lifetime)
- Save money:
  - \$300 (annually)
  - \$1,521 (lifetime)

(All savings shown are estimates, based on current conditions and rates.)

### The electricity saved on this project over the lifetime of the measures is the equivalent of approximately:

- 9,406 pounds of carbon dioxide (CO<sub>2</sub>) emissions avoided, or
- 4,396 pounds of coal not burned, or
- 361 gallons of oil not burned.

# **Background**

Francis Laudano and Cheryl Fellnor of Rocky Hill are among the many Eversource customers who have benefited from the Home Energy Solutions - Income Eligible (HES-IE) program. The couple rents a 130-year-old New England farmhouse, which features seven rooms, a sun porch and a basement. The house is heated by oil and contains old foam insulation.

# The Challenge

While enjoying the old-fashioned ambience of their home, the couple notes that it is drafty and costly to heat. While an aging hot water heater, which was eventually replaced by the landlord, may have contributed to the problem, it soon became apparent that there were other factors responsible for turning the vintage residence into an "energy pit."

#### The Solution

Having heard about the HES-IE program from an acquaintance, Frances and Cheryl called 877 WISE-USE and Eversource connected them with an authorized program contractor. During the in-home visit, an assessment was conducted to determine potential energy savings and then a crew of certified professional technicians got to work to make a variety of energy-saving improvements.

#### **Weatherization: Improves Heating** and Cooling Efficiency

Keeping as much conditioned air (heated or cooled) as possible inside a home is the key to reducing home energy consumption. The HES-IE energy experts performed a blower door test to determine the cubic

"This is a program everyone should know about. It put money in our pockets."

Francis Laudano

feet of air per minute (CFM) flowing through the home. This is done by placing a tarp over the front door with a built-in industrial fan to depressurize the home. This reverses the airflow and enables the techni-

cians to find the sources of air leaks and drafts with the aid of a smoke stick. The test indicated that the majority of the air leakage was coming from the doors, so the technicians installed weather striping and door sweeps on three doors. The blower door test was then performed again and showed a nine percent improvement.

#### **Efficient Use of Hot Water**

By installing low-flow faucet aerators and a handheld showerhead, the couple reduced the amount of water they use and subsequently reduced the amount of energy needed to heat the water. The technicians also reset the hot water heater thermostat to an optimum temperature and installed insulation on the hot water pipes, lowering energy use even more.

#### **Energy - Efficient Lighting**

The HES-IE technicians also replaced incandescent bulbs throughout the house with energy-saving compact fluorescent light (CFL) bulbs. CFLs use up to 75 percent less energy and last up to 10 times longer than incandescent light bulbs. A CFL outdoor lamp was also installed.

After the work was done, the technicians sat down with Cheryl and reviewed ways that the couple could further cut their energy costs. She was impressed by the suggestions and has since begun acting on them, for example, by taking 10-15 minute showers instead of 20-minute ones and making it a point to turn the lights off when leaving a room.

#### **Benefits**

- Program is free to Connecticut renters and homeowners who are income eligible. Income guidelines can be found at EnergizeCT.com/hes
- Energy experts use instrument-guided technology to identify critical air leaks and drafts
- Professional caulking, sealing and hot water pipe insulation
- Energy efficient lighting products included
- Some households may qualify for insulation and appliance upgrades
- Services result in monthly, year-round energy savings

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