



Home Performance with ENERGY STAR®

Home Performance with ENERGY STAR offers proven whole house solutions.

PROJECT INFORMATION

Program Name

- Home Performance with ENERGY STAR

Customer

- Marlena Schmid

Location

- Cranford, New Jersey

About the Home

- 1,418 square feet

Installed Measures

- Air sealing
- Gas furnace
- Gas water heater
- Central air conditioning

Project Cost

- \$16,700

Financial Incentives

- \$5,000 incentive
- \$10,000 0% interest loan

PROJECT SAVINGS

Total Energy Savings

- 32.3%

Estimated Annual Savings

- \$365-\$450 on utility bills
- 778 kWh
- 345 therms natural gas

Annual Emission Reductions

- 5,382 pounds of carbon dioxide eliminated

Environmental Benefits

- Savings are equivalent to the carbon dioxide emissions from 216 gallons of gasoline consumed in one year.



“Based on the terms and conditions of the loan and the estimated savings, I had no problem moving forward with having the work done in my home.”

— Marlena Schmid,
homeowner

Challenge

Marlena Schmid, a Cranford resident, received *New Jersey's Clean Energy Program's*™ e-newsletter, where she read about the Home Performance with ENERGY STAR Program. Ironically, she was familiar with one of the contractors, who had previously visited her home. Marlena's 53 year old, 1,418 square foot home was drafty and her utility bills were too high. She had to move a space heater from room to room in the winter and run ceiling fans in the summer. Marlena was ready to improve her home's comfort.

What is Home Performance with ENERGY STAR?

Home Performance with ENERGY STAR offers whole house solutions to improve comfort and reduce energy costs by up to 30%. To get started, a Building Performance Institute contractor performs a home assessment to identify energy efficient recommendations. Attractive incentives and low-interest financing are available to help pay for the energy efficiency upgrades.

Solution

After her home assessment was conducted, Marlena was surprised to find out her heating and cooling system was from 1987. She also did not realize how drafty her home actually was. The contractor conducted a pre and post blower door test before and after the air sealing work was performed. The blower door is a door insert with a large fan. After closing all windows in a home, the fan is used to create pressure in the home that is about equal to 20 mph winds. With the home under pressure, the auditor can determine the leakage rate of a home. The pre-blower door test indicated an air leakage rate of nearly five times the recommended amount, and the test after the installation of air sealing resulted in a reduction of nearly one half of the excess leakage. To complete the job, the contractor performed air sealing work, installed a new gas furnace and upgraded the water heater and central air conditioning unit. The new heating system is a smaller unit than what Marlena had previously as systems should be properly sized to suit a home's heating needs.

Marlena received \$5,000 in incentives and took advantage of the zero-percent interest loan.