



THE O'SHAUGHNESSY HOME ENERGY EFFICIENCY OVERHAUL

NEW INSULATION, DUCTLESS MINI SPLIT HEAT PUMP, HEAT PUMP HOT WATER HEATER, AND MORE



66 The comfort level in our home is so much higher. It is no longer drafty. And we really appreciate not having to listen to the oil burner run non-stop all winter! 99

-David O'Shaughnessy, Katonah

YEAR: 1926 BEDROOMS/BATHS: 4 BR/1.5 BA

STYLE: CAPE COD HEAT SOURCE: OIL & ELECTRIC

SQUARE FEET: 2,250 CONTRACTOR: PHOENIX MECHANICAL

LOWER ENERGY USAGE

www. SustainableWestchester.org • www.Bedford2030.org

THE O'SHAUGHNESSY HOME ENERGY EFFICIENCY OVERHAUL

Katonah residents of 17 years, David O'Shaughnessy and his family tackled a massive renovation project last year to upgrade their home energy system.

The family first installed energy-efficient insulation on their previously un-insulated house, and replaced their siding as well. They also installed a mini air source heat pump system to heat and cool the first floor of their home. Since these installations, the family's home has become far more comfortable and consistently heated, and have noticed much less of a need to run their furnace thanks to the air source heat pump system.

As the family's furnace usage has gone down, their heat savings have gone up, with paybacks on their investment growing every month.

PROBLEMS UNCOVERED

The O'Shaughnessy Family had an energy audit performed which found no insulation in the walls, windows with plastic frames that did not close properly, an outdated built-in wall air conditioner, and an old electric water heater.

IMPROVEMENTS COMPLETED

They hired local contractors to:

- Take out the A/C unit and install a ductless mini split heat pump
- Swap out the water heater for a hybrid heat pump/electric water heater
- Remove and replace the three layers of old siding, adding insulation in the process
- Replace existing thermostats with Nest thermostats
- Install new windows

BENEFITS & IMPACT

- The ductless muni split heat pump provides space heating and cooling more efficiently than traditional fossil fuel powered equipment. This unit provides supplemental heating to reduce the amount of oil needed to heat the home.
- With the new insulation, the house is no longer drafty and the rooms are all an even temperature, instead of a mix of cold and hot rooms.





LOWER ENERGY USAGE