



Energy Efficiency Program Summary

Home Performance with ENERGY STAR

Program Sponsor: NYSERDA	Program Administrator: NYSERDA, Conservation Services Group
Program Location: New York	Eligibility: Residential Customers Whose Electric Utility Participates in System Benefits Charge
Program Start: 2001	Program Type: State Sponsored/Utility Capital

Program Description:

NYSERDA administers the New York Home Performance with ENERGY STAR (HPwES) Program. The primary goal for New York’s HPwES Program is to transform the way energy efficiency services are delivered to the 1–4 family residential market. The New York HPwES program seeks to achieve this goal by:

- Creating a market-based system of supply and demand that supports the renovation of existing homes toward greater energy efficiency, using a “house-as-a-system” approach;
- Enhancing the capacity of the market to supply “one-stop shop” services for comprehensive energy efficiency for one-to-four family homes;
- Developing a network of Building Performance Institute (BPI)-accredited contractors who are willing to market, sell, and provide comprehensive "house-as-a-system" energy services; and
- Requiring diagnostic testing protocols that ensure the health and safety of the home’s occupants, as well as the durability of the home.

Conservation Services Group (CSG) is the program implementation contractor that manages the day-to-day operations.

The New York HPwES Program is designed to encourage participating contractors to promote and implement comprehensive energy efficiency improvements and technologies as part of their regular business practices. The program encourages best practices for home improvement contractors by providing an extensive training structure and requiring BPI accreditation for participating companies and their staff. The Building Performance Institute (BPI) is the national organization used for certifying contractors and their companies. Training initiatives are carried out through a network of regional learning centers across New York State. These learning centers collectively form the Center for Energy Efficiency and Building Science (CEEBS). Currently there are 10 learning centers across the state.

Participating contractors are required to perform Comprehensive Home Assessments (CHAs) that use advanced diagnostic testing equipment and energy modeling computer software. These tools help home performance contractors understand how well, or how efficient, the homes are functioning, and identify which measures are most needed and which measures, individually and in combination, will achieve a targeted level of cost-effective investment. Results of the CHAs are designed to be used by contractors and homeowners to help prioritize and select measures for installation.

The program offers three financing options to homeowners: 1) ENERGY STAR financing offered directly through the program, which results in a one-stop shopping experience for consumers; 2)

NYSERDA's Energy \$mart Loan Fund, in which a customer would apply for financing through a participating lender; or 3) the Homeowner Financing Incentive (HFI), a cash-back option where homeowners receive an incentive directly from NYSERDA for 10% of the cost of the eligible work scope, up to \$3,000.

The New York HPwES also has a low-income component called Assisted Home Performance with ENERGY STAR (AHPwES). Through AHPwES, income-qualified homeowners are eligible to receive grants from NYSERDA to help reduce the cost of installing energy efficiency measures in their homes. AHPwES grants will cover 50% of the cost of an eligible work scope, up to \$5,000 (for a single family home). And the homeowner can access either the ENERGY STAR Loan or the Energy \$mart Loan fund to pay for the cost of the balance of the work scope.

Financing & Financial Products: NYSERDA is funded through system benefits charge, which is paid by customers in the service areas of 6 investor-owned utilities. Long Island Power Authority and Municipal Electric Cooperatives do not participate. As a result, homeowners in those services areas cannot access program incentives.

Loan Products include:

- ENERGY STAR financing (*unsecured*) - \$15,000-\$20,000, depending on credit score – 3, 5, 7, 10-year term. Administered by Energy Finance Solutions (EFS). EFS receives capital from the Fannie Mae Energy program.
- New York Energy \$mart Loan Fund (*secured or unsecured*) - \$20,000 max (\$30,000 if in ComEd territory) – 10-year term. NYSERDA will buy down interest rate by 4%, down to a floor of 3%. Uses multiple lenders who must sign participation agreements with NYSERDA.
- Homeowner Financing Incentive (HFI) – Homeowner receives a 10% rebate, up to \$3,000, in lieu of using other financing options. NYSERDA pays the HFI directly to the homeowner.
- Assisted HPwES Loan – Income-qualified homeowners are eligible for a 50% subsidy, up to \$5,000 (homeowners not eligible for Homeowner Financing Incentive.)

In June 2009, 360 homeowners chose the Homeowner Financing Incentive. 30 homeowners opted with the Energy \$mart Loan Fund, while 41 chose ENERGY STAR financing.

Marketing: NYSERDA funds a robust mass media marketing campaign (TV, radio, print) and offers cooperative advertising incentives to participating contractors.

Enrollment Process: Homeowner contacts participating BPI-accredited contractor. Participating contractor performs Comprehensive Home Assessment (*aka Test In*). Homeowner pays assessment cost, which often varies between contractors and by region. The program does not set CHA fees.

Homeowner chooses financing options.

Homeowner signs a contract with contractor to perform work.

Efficiency measures are installed.

Contractor provides post-installation assessment (*Test Out*).

Homeowner signs certificate of completion.

	<p>Contractor incentives distributed.</p> <p>Consumer financing option implemented (loan executed by lender or 10% HFI processed by NYSERDA).</p>
Audits:	<p>Contractor performs Comprehensive Home Assessment, which could last up to 3 hrs (<i>Test In</i>). During the CHA, the contractor completes a visual inspection of the living space, attic, basement (or crawl spaces), and performs a number of tests using diagnostic equipment, such as a blower door and thermal imaging. The contractor also performs essential health and safety tests to determine whether the major combustion appliances are operating safely. The New York HPwES Program uses modeling software called TREAT to examine potential energy savings.</p> <p>There are Test-Out procedures to ensure proper installation of measures and that the increased air tightness does not cause air quality or combustion health and safety problems. Again, computer modeling used to estimate energy savings.</p>
Implementation Criteria:	<p>The most common categories of efficiency improvements are:</p> <ul style="list-style-type: none"> ● Air sealing/insulation – (45% of dollar value) ● Central Heat/AC – (22%) ● Window/doors – (29%) ● Non-energy building performance, such as crawl spacing sealing – (3%)
Contractors, Training & Accreditation:	<p>Participating contractors must be BPI accredited. The program actively recruits contractors.</p> <p>Achieving BPI accreditation can be time-consuming, often taking months. NYSERDA does provide incentives for each phase of the process, training, and certification.</p> <p>The program has also created an extensive network of learning centers that provide building science training for potential participants.</p>
Contracts:	<p>Participation agreements between NYSERDA and BPI-accredited contractors.</p> <p>Contract for installation of eligible measures is between homeowner and participating BPI-accredited contractor.</p> <p>Loan agreement between homeowner and lender.</p> <p>Participating lenders in Energy \$mart Loan fund sign participation agreements.</p>
Repayment, Collection & Flow of Funds:	<p>If financed, the flow of funds depends on the loan product.</p> <p>ENERGY STAR Loan – Energy Finance Solutions pays contractor for implementation once homeowner signs and submits certificate of completion. Homeowner repays EFS each month, via ViewTech Financial, which services the loan. EFS invoices NYSERDA monthly for interest rate buy-down.</p> <p>Energy \$mart Loan Fund – Homeowner receives cash from the participating lender to pay contractor. Homeowner repays loan according to the terms of the lender. NYSERDA pays the lump sum, interest rate buy-down to the lender.</p>

For the Homeowner Financing Incentive, NYSERDA provides the payment directly to the homeowner after the certificate of completion has been received. Customer pays the participating contractor in full upon completion of the project.

**Program
Sustainability:**

Utility cooperation is a challenge. The program does require homeowners to sign a utility release form so historic and future energy use data can be obtained. However, the investor-owned utilities are not required to release energy usage data to NYSERDA.

System Benefits Charge is assessed on the electric portion of the consumer's utility bill, although much of the energy savings is seen on heating bills.

Program took 2 or 3 years to really hit stride. Currently, have 500 projects per month. In June 2002, 54 projects in the month; by June 2003, 134 projects in the month. One hundred projects per month was the initial goal.

Interesting to note that this program was rolled out regionally, not statewide, when launched in 2001. The program started in Syracuse then moved to Buffalo, Binghamton, and Albany. The first program participants were trained "in-field" with little classroom experience. Today, levels of participation and infrastructure vary across the state.

NEW YORK HOME PERFORMANCE WITH ENERGY STAR

Program Schematic

