

# **NYSERDA Residential Existing Homes (One to Four Units) Energy Efficiency Projects with Income-based Incentives by Customer Type: Beginning 2010**

## **Overview**

**IMPORTANT! PLEASE READ DISCLAIMER BEFORE USING DATA.** The Residential Existing Homes Program is a market transformation program that uses Building Performance Institute (BPI) Goldstar contractors to install comprehensive energy-efficient improvements. The program is designed to use building science and a whole-house approach to reduce energy use in the State's existing one-to-four family and low-rise multifamily residential buildings and capture heating fuel and electricity-related savings. The Program provides income-based incentives, including an assisted subsidy for households with income up to 80% of the State or Median County Income, whichever is higher to install eligible energy efficiency improvements including building shell measures, high efficiency heating and cooling measures, ENERGY STAR appliances and lighting.

**D I S C L A I M E R:** Estimated Annual kWh Savings, Estimated Annual MMBtu Savings, and First Year Energy Savings \$ Estimate represent contractor reported savings derived from energy modeling software calculations and not actual realized energy savings. The accuracy of the Estimated Annual kWh Savings and Estimated Annual MMBtu Savings for projects has been evaluated by an independent third party. The results of the impact analysis indicate that, on average, actual savings amount to 35 percent of the Estimated Annual kWh Savings and 65 percent of the Estimated Annual MMBtu Savings. The analysis did not evaluate every single project, but rather a sample of projects from 2007 and 2008, so the results are applicable to the population on average but not necessarily to any individual project which could have over or under achieved in comparison to the evaluated savings. The results from the impact analysis will be updated when more recent information is available. Many factors influence the degree to which estimated savings are realized, including proper calibration of the savings model and the savings algorithms used in the modeling software. Some reasons individual households may realize savings different from those projected include, but are not limited to, changes in the number or needs of household members, changes in occupancy schedules, changes in energy usage behaviors, changes to appliances and electronics installed in the home, and beginning or ending a home business. Beginning November 2017, the Program requires the use of HPXML-compliant modeling software tools and data quality protocols have been implemented to more accurately project savings. For more information, please refer to the Evaluation Report published on NYSERDA's website at: <http://www.nyserda.ny.gov/-/media/Files/Publications/PPSER/Program-Evaluation/2012ContractorReports/2012-HPwES-Impact-Report-with-Appendices.pdf>.

The New York Residential Existing Homes (One to Four Units) dataset includes the following data points for projects completed during Green Jobs Green-NY, beginning November 15, 2010: Home Performance Project ID, Home Performance Site ID, Project County, Project City, Project Zip, Gas Utility, Electric Utility, Project Completion Date, Customer Type, Low-Rise or Home Performance Indicator, Total Project Cost (USD), Total Incentives (USD), Type of Program Financing, Amount Financed Through Program (USD), Pre-Retrofit Home Heating Fuel Type, Year Home Built, Size of Home, Volume of Home, Number of Units, Measure Type, Estimated Annual kWh Savings, Estimated Annual MMBtu Savings, First Year Energy Savings \$ Estimate (USD), Homeowner Received Green Jobs-Green NY Free/Reduced Cost Audit (Y/N)

## **Statistical and Analytic Issues**

Multiple Home Performance Project IDs can exist at the same Home Performance Site ID for a variety of reasons including multiple contractors, phased work, or different homeowners. In the event the assisted subsidy cap is reached, a second project may be completed with the balance of the work eligible to receive market rate incentives.

Project Completion Date is the date the final project completion documents were reviewed and approved by the Program, not the actual date the project work was completed.

Projects with negative kWh or MMBtu savings represent projects that included a fuel conversion of heating or domestic hot water fuel. For example, if a homeowner switched from electric resistance heating to a natural gas-fired heating system, there would be positive kWh savings and negative MMBtu savings.

Amount Financed Through Program may or may not include \$150 loan origination fee.

Low-Rise projects are not eligible for residential loan products or free/reduced cost audits. Each unit served on a low-rise project is treated as an individual project.

Free/Reduced costs audits must be reported by contractor to be included in dataset.

### **Limitations of Data Use**

Where data are not available or applicable, field will be blank.