



NYSERDA

NY Residential Existing Homes Programs

Low-Income Forum on Energy

May 2018

Agenda

- What is NYSERDA?
- The Home Energy Assessment and Energy Efficiency Programs
 - Overview of EmPower New York
 - Overview of Assisted Home Performance with ENERGY STAR
 - Overview of Home Performance with ENERGY STAR
 - NYSERDA Financing Options
- Implementation Partners
- Upcoming Program Changes
- Recycling Mercury Thermostats
- Questions and Answers

New York State Energy Research and Development Authority (NYSERDA)

NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise and funding to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce their reliance on fossil fuels.

NYSERDA professionals work to protect our environment and create clean-energy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York since 1975

Current Residential Energy Efficiency Programs

- **EmPower New York**
 - Low Income ($\leq 60\%$ of State Median Income)
 - Free services
- **Assisted Home Performance with ENERGY STAR®**
 - Moderate Income ($\leq 80\%$ of Area Median Income)
 - Reduced cost services
- **Home Performance with ENERGY STAR®**
 - Market Rate ($> 80\%$ of Area Median Income)

Home Energy Efficiency Programs

Improving the energy efficiency of your home is a smart investment. NYSERDA offers a range of residential programs designed to help New York State residents identify areas where their homes are driving up energy costs and provide assistance in completing energy efficiency improvements for a healthier, more comfortable home.

It starts with a home energy assessment, conducted by trained and experienced Home Performance contractors, which gives you a top-to-bottom look at where your home is wasting energy. You receive a detailed list of recommended improvements that can include everything from added insulation and energy efficient lighting to a high-efficiency heating system and ENERGY STAR® certified appliances.

Find the program that best suits your needs by entering your County and the number of people living in your house or apartment. Use the chart below to see the maximum income level allowed by each program.

County:

Number of People Living in House/Apartment:

	Home Performance with ENERGY STAR®	Assisted Home Performance with ENERGY STAR®	EmPower New York
Eligibility	Own or rent* a single-family home or multifamily home with up to 4 units	Own or rent* a single-family home or multifamily home with up to 4 units	Own or rent* a single-family home or live in a building with 100 or fewer units
Income Guidelines	No income restrictions	Household income is less than: \$.....	Household income less than: \$..... or participate in a utility payment assistance program
Home Energy Assessment Cost	Free or reduced for most New Yorkers	Free	Free
Income Eligible Discounts	Not applicable	Up to 50%	100%
Loan Interest Rate	4.99 - 7.49%**	3.49 - 3.99%**	Improvements are 100% covered
Additional Information	Learn More	Learn More	Learn More
	Apply Now	Apply Now	Apply Now

*Renters need permission from Landlords to move forward.

**NYSERDA offers lower interest rates to lower income New Yorkers and those who cannot qualify for traditional financing. Use the interest rate estimator to determine which interest rate may be available to you.

Residential Energy Efficiency Program Options

<https://www.nyserda.ny.gov/All-Programs/Programs/Home-Energy-Efficiency-Upgrades>

What we do...

- A comprehensive review of a home's energy performance which requires an understanding of the dynamic interaction among home systems performed by a BPI GoldStar contractor approved to work in NYSERDA's Residential Energy Efficiency Programs.
 - Heating and cooling systems & thermostats
 - Water heaters
 - Appliances
 - Energy Efficient Lighting, LED bulbs
 - Shell Improvements, insulation and air sealing
 - Ventilation
 - Health & Safety

Home Energy Assessment

Home Energy Assessment

- What is a Home Energy Assessment
 - The Home Energy Assessment provides a top-to-bottom look at opportunities for energy improvements.
 - Identifies the root cause of any drafts, inconsistent temperatures, heating and cooling system failures, or other problems a homeowner may be experiencing.
 - Health and safety checks are included.

Home Energy Assessment

- What a Homeowner should expect:
 - A typical Assessment should take 2-3 hours.
 - Homeowner will need to be present.
 - Homeowner is encouraged to accompany contractor.
 - Contractor will likely perform combustion analyst testing and run a blower door.

Home Energy Assessment

- For households earning $< 200\%$ AMI, the Home Energy Assessment is provided at no cost
- For households earning between 200% and 400% of the AMI the Home Energy Assessment is provided at a reduced cost.
- For households earning more than 400% of the AMI, the Home Energy Assessment is provided at cost to the homeowner.

Home Energy Assessment Eligibility

- Income Chart

DETERMINE YOUR HOUSEHOLD INCOME RANGE

If your household income is greater than \$43,120, use the chart below to find where it falls in relation to your county's median income. This will determine the cost, to you, of your home energy assessment (if any).

1. Find your county (this is where the home you wish to have assessed is located).
2. Use the corresponding columns to find the range that includes your household income.
3. Check the appropriate box on the front of the application.
4. Use your household income range from the chart below and the chart to the right to determine the cost, to you, of your assessment (if any).

HOME ENERGY ASSESSMENT FEE SCHEDULE

Household Income Range	Single-Family Homes Less than 3,500 Square Feet*		2-4 Unit Residential Building or Single Family Homes ≥ 3,500 Square Feet*	
	Cost to Customer	NYSERDA Payment to Contractor	Cost to Customer	NYSERDA Payment to Contractor
≤ 80% AMI	- 0 -	\$250	- 0 -	\$400
≤ 200% AMI	- 0 -	\$250	- 0 -	\$400
201-250% AMI	\$50	\$200	\$80	\$320
251-300% AMI	\$100	\$150	\$160	\$240
301-350% AMI	\$150	\$100	\$240	\$160
351-400% AMI	\$200	\$50	\$320	\$80
> 400% AMI	Market Rate	- 0 -	Market Rate	- 0 -

*Above grade conditioned space.

HOUSEHOLD INCOME GUIDELINES 2018

County Name	≤ 80%	≤ 200%	≤ 250%	≤ 300%	≤ 350%	≤ 400%
Albany	\$66,480	\$166,200	\$207,750	\$249,300	\$290,850	\$332,400
Allegany	\$43,120	\$107,800	\$134,750	\$161,700	\$188,650	\$215,600
Broome	\$52,560	\$131,400	\$164,250	\$197,100	\$229,950	\$262,800
Cattaraugus	\$47,440	\$118,600	\$148,250	\$177,900	\$207,550	\$237,200
Cayuga	\$52,480	\$131,200	\$164,000	\$196,800	\$229,600	\$262,400
Chautauqua	\$44,800	\$112,000	\$140,000	\$168,000	\$196,000	\$224,000
Chemung	\$51,680	\$129,200	\$161,500	\$193,800	\$226,100	\$258,400
Chenango	\$45,280	\$113,200	\$141,500	\$169,800	\$198,100	\$226,400
Clinton	\$55,440	\$138,600	\$173,250	\$207,900	\$242,550	\$277,200
Columbia	\$59,680	\$149,200	\$186,500	\$223,800	\$261,100	\$298,400
Cortland	\$51,920	\$129,800	\$162,250	\$194,700	\$227,150	\$259,600
Delaware	\$47,200	\$118,000	\$147,500	\$177,000	\$206,500	\$236,000
Dutchess	\$71,520	\$178,800	\$223,500	\$268,200	\$312,900	\$357,600

Home Energy Assessment Eligibility

- One Home Energy Assessment per owner per property.
- If a homeowner of a single family residence is eligible for a no-cost audit, the contractor is reimbursed \$250 for completing the audit.
- For homes over 3,500 square feet or 2-4 family homes, the contractor is reimbursed \$400 for completing a no-cost audit.

Home Energy Assessment

Application Process:

- Applying online is the quickest and easiest way to get started and is preferred by NYSERDA:
nyserdera.ny.gov/All-Programs/Programs/Home-Performance-With-ENERGY-STAR
- But [PDF version](#) is available

EmPower New York

EmPower New York Overview

- The low income component of the programs ($\leq 60\%$ State Median Income)
- EmPower New York manages its limited budget by setting production targets and assigning work to Participating Contractors
- Projects are typically assigned to Participating Contractor as one of two categories:
 - **Electric Reduction:** Typically restricted to minor electric savings measures, such as lights and refrigerator/freezer replacements.
 - **Home Performance:** Typically more comprehensive projects, usually involving insulation and air-sealing installations.

EmPower New York Overview

- Since 2004, and through March 2018, NYSERDA has served approximately 121.5 K homes/137.9 K units
- 126.6 M in annual kwh savings
- 1.8 M in annual MMBTu savings
- 41.9 M in annual \$ savings

EmPower: Customer Eligibility

- Low Income (<60% of State Median Income)
- Owners of 1-4 family existing homes
- Renters in a single unit of a home with 4 units or fewer
 - Renters can receive Electric Reduction measures, or Home Performance measures with landlord authorization. Certain measures may required a landlord contribution.
- Renters in a building with 100 or fewer units
 - NYSEERDA can serve units on a individual basis; however, if more than 4 units will be served, the project may be referred to the Multifamily Program
- Electric customer of Central Hudson, Con Edison, National Grid, NYSEG, Orange and Rockland, or Rochester Gas & Electric and pay SBC
 - Very limited funding for municipal electric customers
- Tenants responsible for paying utility bills

EmPower: Financial Assistance

- Free Home Energy Assessment
- No cost energy improvements such as:
 - Air sealing
 - Insulation
 - Setback thermostats
 - Energy efficiency lighting
 - Replacement of old, inefficient refrigerators and freezers
- Average workscope size is \$4,000 in services, with a maximum of \$7,000
- EmPower uses set pricing with Upstate/Downstate pricing structures
- Energy education provided
- If \$7,000 cap is exceeded or home needs more comprehensive measures, such as heating equipment replacement, homeowner may be eligible for Assisted HPwES.
- Project eligible for Quality Assurance Inspection for up to 1 year following completion of work.

EmPower: How to Apply

Complete [EmPower New York Application](#) and submit with required documents

- **Income documentation**
 - Copy of entire award letter for HEAP, SNAP (Food Stamps), TANF (Temporary Assistance for Needy Families) or Supplemental Security Income dated within the past 12 months; OR
 - All household gross income for the last month, including pay statements, award letters for social security or social security disability, self employment documentation, etc. See page 4 of application for full details.
- **Copy of electric bill**
- **Copy of gas or fuel bill**
- **Proof of ownership or landlord authorization**

EmPower Application

- Organizations can access the most recent version of the EmPower application from NYSERDA's website.
- Critical to always use the most recent version.
- Submitting older versions will slow down the review process and the application may be rejected.

APPLICATION

EmPower New York Program



The following information will help determine which services are most appropriate for you. In some situations, EmPower services are provided by agencies of the Weatherization Assistance Program (WAP). In these instances, this application will serve as an application for the WAP, and may be forwarded to your local agency for these services. Please print clearly and provide as much information as possible.

SECTION A: APPLICANT INFORMATION

Name		
Address		Apt #
City	State	Zip
County	Primary Phone (include area code)	Secondary Phone (include area code)
Email		
Mailing Address (if different from above)		
Additional Contact Person	Relationship to Applicant	Phone Number (include area code)



Assisted Home Performance with ENERGY STAR® (AHPwES)

AHPwES Overview

- Since 2001, and through March 2018, NYSERDA has served approximately 31,808 homes through AHPwES
- 23.2 M in annual kWh savings
- 1.16 M in annual MMBTu savings
- 22.4 M in annual \$ savings

AHPwES: Customer Eligibility

- Moderate income projects for households with income up to 80% of Area Median Income.
- Owners of 1-4 family existing homes
 - Landlords may be eligible for the discounted rate with documentation of income-eligible tenants
- Electric customer of Central Hudson, Con Edison, National Grid, NYSEG, Orange and Rockland, or Rochester Gas & Electric and pay into the SBC
 - Very limited funding for municipal electric customers
- One free/reduced cost energy assessment per customer, per home

AHPwES: Incentives/Benefits

- Free Home Energy Assessment
- Assisted HPwES Discount is up to 50% of cost of eligible work, up to \$4,000 for single family home or \$8,000 for 2-4 family home
- Residential Financing Options
 - Access to NYSERDA loan products at lower interest rates (3.49-3.99%)
- 5% contractor incentive of the cost of eligible work
- Customers may still apply for applicable utility rebates.
- Project eligible for Quality Assurance Inspection for up to 1 year following completion of work.

Home Performance with ENERGY STAR®

Home Performance with ENERGY STAR® (HPwES)

- Since 2001, and through March 2018, NYSERDA has served over 53,000 homes through HPwES
- 23.5 M in annual kWh savings
- 1.6 M in annual MMBTu savings
- 34 M in annual \$ savings

HPwES: Customer Eligibility

- Market Rate (>80% of Area Median Income) – Income verification is *not needed*
- Owners of 1-4 family existing homes
 - Does not need to be owner occupied
- Electric customers of Central Hudson, Con Edison, National Grid, NYSEG, Orange and Rockland or Rochester Gas & Electric and pay into the SBC
 - Very limited funding for municipal electric participants
- One free/reduced cost energy assessment per customer, per home

HPwES: Incentives/Benefits

- Free Home Energy Assessment
 - For households with income \leq 200% AMI
- Reduced-Cost Home Energy Assessment
 - For households with income between 200% - 400% AMI
- Residential Financing Options –
 - Loans with interest rates between 3.99 and 7.49%
- 10% contractor incentive of the cost of eligible work
- Customers may still apply for applicable utility rebates
- Project eligible for Quality Assurance Inspection for up to 1 year following completion of work.

From Home Assessment to Completion

- Homeowner completes a Program application
- Applications are processed and approved, Project assigned or Customer chooses contractor
- Home Energy Assessment is completed by the Contractor
- Work scope submitted to the program and reviewed
- Energy efficiency measures installed by the contractor
- Homeowner signs certificate of completion
- Contractor uploads completion documentation, NYSERDA issues payments
- Some projects selected for third-party Quality Assurance Inspection

Residential Financing Options

Residential Financing Options

- Two types loans are available for the customers
- Loans available up to \$13,000 per applicant, and up to \$25,000 per applicant if the project meets certain cost-effectiveness standards (<15 year simple payback)
- Both options offer repayment periods of 5,10, or 15 years
- Current interest rates range from 3.99% – 7.49% with a 0.5% interest rate discount if the loan is on automatic payment options

Residential Financing Options

- **Smart Energy Loan**
 - A more traditional loan repaid monthly to NYSERDA's loan servicer, Concord Serving Corporation
- **On-Bill Recovery (OBR Loan)**
 - Pay for improvement on their energy bill for participating utilities: Central Hudson, Con Edison, National Grid, NYSEG, O&R, RG&E.
 - The expected annual energy cost savings must be greater than the annual loan repayment. In other words, the energy upgrades should pay for themselves with the savings they create.

How to Apply

Home Energy Assessment:

- Applying online is the quickest and easiest way to get started and is preferred by NYSERDA: nyserdera.ny.gov/All-Programs/Programs/Home-Performance-With-ENERGY-STAR
- But [PDF version](#) is available

Assisted Home Performance with ENERGY STAR Discount

- Applying online is the quickest and easiest way to get started and is preferred by NYSERDA: <https://app.energyfinancesolutions.com/consumerportal/>
- But [PDF version](#) is available

Residential Financing:

- Applying online is the quickest and easiest way to get started and is preferred by NYSERDA: <https://app.energyfinancesolutions.com/consumerportal/>
- But [PDF version](#) is available

Helpful Links

- **EmPower Program website:** <https://www.nyserda.ny.gov/empower>
- **AHPwES Program website:** <https://www.nyserda.ny.gov/assisted-home-performance>
- **Residential Financing website:** <https://www.nyserda.ny.gov/hp-finance>
- **Participating HPwES Contractors:** <https://nyserda.energysavvy.com/contractors/>
- **Eligible Measures:** <http://hpwescontractorsupport.com/wp-content/uploads/2017/05/3.11-Consumer-Friendly-Eligible-Measures-List-for-HPwES.pdf>
- **Video:** What to expect during a home energy assessment.
- **Fact Sheets and Program Materials** – Available through NYSERDA's marketing tool. <https://services.nyserda.ny.gov/publications/>

Program Implementation

Partners in Implementation

- **Implementations Services (CLEAResult)**—
 - Handles programmatic (customer and contractor) inquiries;
 - Processes Program applications
 - Provides technical workscope reviews
 - Processes contractor incentives
 - Provides account management services and contractor training
 - Performs Quality Control (QC) inspections
- **Quality Assurance Providers (IBTS and Honeywell)** – Third party Quality Assurance (QA) inspections
- **Empower New York Appliance Vendors (various)** – Supplies new energy efficient refrigerators and freezers

Partners in Implementation

- **Energy Finance Solutions (EFS)** – Provides income verification for program eligibility, originates all NYSERDA residential loans, pays assisted subsidy to program contractors, handles all aspects of loans until project completion. If a homeowner has a loan question pre-project completion, direct them to EFS.
- **Concord Loan Service(Concord)** – Services NYSERDA loans from project completion until loan is paid in full. If a homeowner has a loan question post project completion, direct them to Concord

Program Contacts

- 1-877-NYSMART for general inquiries
- Info.Residential@nyserda.ny.gov for general inquiries
- Applications.Residential@nyserda.ny.gov to submit applications
- Support.Residential@nyserda.ny.gov to report customer concerns

- Contractor Support Line: 1-800-284-9069

- Join our email list for Program Announcements and other important program information – send us an email at hpwes@nyserda.ny.gov

Upcoming Programmatic Changes

Upcoming Changes-Program Redesign

- Single Program offering instead of independent HPwES/AHPwES and EmPower Programs
- Combined application for residential energy efficiency services
- Updated energy efficiency measure eligibility
- Review of, and possible updates to, incentive calculations
- Timing: Mid to late 2018

Mercury Thermostat Recycling

Reminder

- Since 2005, New York State has prohibited the disposal of mercury-containing thermostats in the trash.
- National Renewable Energy Laboratory (NREL) has guidance on how to recycle mercury containing thermostats and using their field guides.
- The Mercury Thermostat Collection Act of 2013 was enacted to provide for the mandatory and sound management of out-of-service mercury-containing thermostats by providing New Yorkers a more convenient and safe drop-off and recycling options.
- Contractors have a statutory obligation to deliver removed or replaced mercury-containing thermostats to a mercury thermostat collection site and are prohibited of disposing of mercury containing thermostats in a solid waste management facility. They also must follow the device to a recycling drop off point and can not leave behind on premises.

Collection and Disposal

- NREL Guidance: Standard Work Specification 5.3104.1b *Controls* – *Thermostat Replacement* and Field Guides for handling thermostats containing mercury.
- Contractors can locate authorized mercury-containing thermostat collection sites through the Thermostat Recycling Corporation (TRC)
- Visit TRC's website: <https://www.thermostat-recycle.org/> to find a local collection site

The screenshot shows the TRC website's search results for zip code 12203. The page features a navigation bar with links like 'Find a Site', 'Sign Up', and 'State Programs'. Below the search results, there is a table listing 15 drop-off locations. The table has columns for 'LOCATION', 'DISTANCE', 'MAP', and 'LOCATION TYPE'. The locations listed are all wholesalers in Albany, NY.

LOCATION	DISTANCE	MAP	LOCATION TYPE
▶ Capitol Winair Co. 71 Fuller Road #7 Albany, NY 12205 518-459-0299	1.65 miles	Google Maps	Wholesaler
▶ TRANE PARTS CENTER 51 RAILROAD AVE ALBANY, NY 12205 518-785-6506	1.67 miles	Google Maps	Wholesaler
▶ TRANE HVAC PARTS & SUPPLY 51 RAILROAD AVE ALBANY, NY 12205 518-785-6506	1.67 miles	Google Maps	Wholesaler
▶ THE SIMONS COMPANY 40 RAILROAD AVENUE ALBANY, NY 12205 518-489-2905	1.68 miles	Google Maps	Wholesaler
▶ Bell Simons	1.48 miles	Google Maps	Wholesaler

Additional features on the page include a 'Collection Site Near You' section with a 'Submit' button and a 'Recycle With Us' section with a 'Submit' button. The page also includes social media icons for Facebook, LinkedIn, and YouTube.

How the Program Works



1. Mercury thermostats are removed from wall



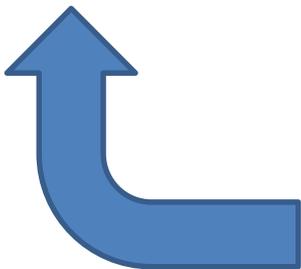
2. Thermostats are taken to closest collection point or stored in TRC's container at job site



3. When bin is filled or one year's time of accumulation, it is sent to TRC's processing facility in Port Washington, Wisconsin

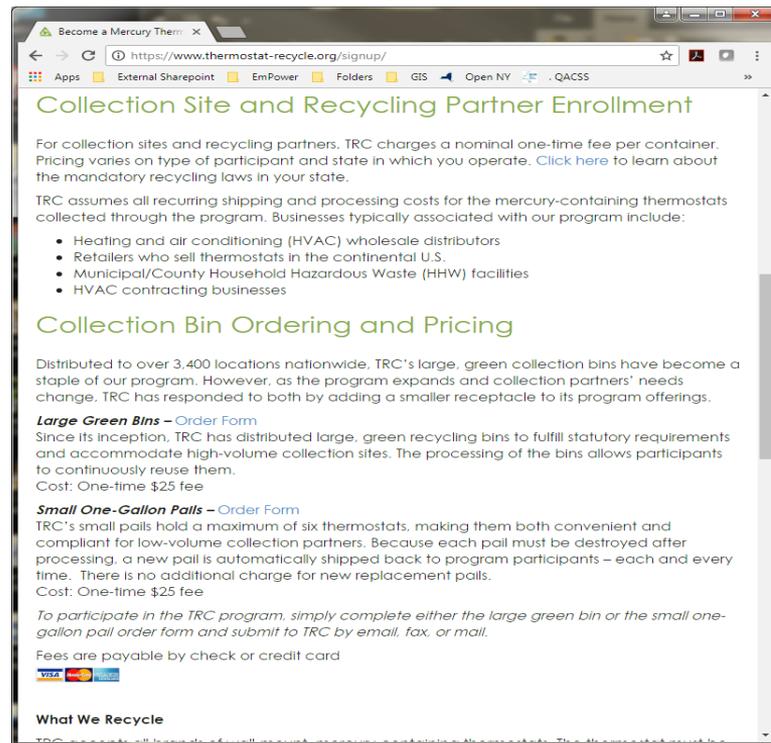


4. After processing, the empty bin is returned to start the collection process again



Or, become a Collection Site

- Businesses can be a collection site for mercury-containing thermostats
- The Thermostat Recycling Corporation assumes all recurring shipping and processing costs
- Various bin sizes available
- No charge for containers
- Visit its website: <https://www.thermostat-recycle.org/signup> to learn more



Questions & Answers