



APPENDIX 4c: HPwES Eligible Measures & Accessories

NY Home Performance with ENERGY STAR® Eligible Measures and Accessories

This is a general guide to eligible incentives and financing options available through NYSERDA's Home Performance with ENERGY STAR (HPwES) Program. Eligibility may vary based on the energy efficiency requirements for each upgrade type, results of the comprehensive home assessment, fuel type, energy utility, and funding source availability.

Subject to the terms described on pages 2 and 3, the upgrades marked with an "✓" below on the "Prequalified List" are eligible for the 50% Assisted Subsidy for income-eligible households and contractor incentives for market rate and Assisted projects. NYSERDA also offers two financing options through Green Jobs – Green NY (GJGNY): a Smart Energy Loan and an On-Bill Recovery (OBR) Loan. A Smart Energy Loan project for up to \$13,000 that includes only the upgrades on the "Prequalified List" below requires no additional cost-effectiveness screening. If the project includes additional eligible upgrades below that are not on the Prequalified List, the loan is subject to cost-effectiveness standards as described on page 4. Items on this list without a checkmark are eligible for financing, subject to cost-effectiveness standards, but not eligible for the 50% Assisted Subsidy or contractor incentives.

Table 1. Eligible Measures – Prequalified List

| | Eligible Measures | Minimum Efficiency Requirements | Prequalified |
|---|--|--|--------------|
| Primary Heating and Cooling System ^{1, 6, 8} | Furnace ² – Natural Gas or LP | AFUE 95% (as long as not prohibited by local codes). Furnaces with ECM Motor allowed. | ✓ |
| | Furnace ² – Fuel Oil | AFUE 85% | ✓ |
| | Boiler – Gas Condensing | AFUE 90% | ✓ |
| | Boiler – Oil Condensing | AFUE 87% | ✓ |
| | Boiler – Non-Condensing ³ | AFUE 85% (project must include boiler reset control) | ✓ |
| | Boiler – Steam | AFUE 82% (size must be matched to cumulative capacity of connected radiators, per Institute of Boilers & Radiator Mfrs (IBR) standards) | ✓ |
| | Boiler Reset Controls | Programmed properly per manufacturer's specifications and site conditions. Maximum price of \$500. | ✓ |
| | Air Source Heat Pump (electric split systems) ² | 14.5 SEER / 12 EER / 8.2 HSPF | |
| | Ground Source Heat Pump ² | ENERGY STAR Qualified (closed-loop, open-loop, or direct expansion). Requires submission of detailed engineering design work prior to approval. | |
| and | Wood Stove ⁴ | EPA certified for particulate matter output of 4.5 grams per hour or less | |
| ing | Pellet Stove/Pellet Stove Insert ⁵ | EPA certified for particulate matter output of 2.0 grams per hour or less | |
| Primary Heati | Distribution Improvements in Natural Gas or Electrically Heated Homes ⁶ | Installed in accordance with all applicable state and local codes | |
| | Distribution Improvements in Oil or Propane Heated Homes ⁶ | Installed in accordance with all applicable state and local codes | ✓ |
| | Duct Sealing | UL 181B mastic or tape; use of "duct tape" is disallowed | ✓ |
| | Duct Insulation | Installed in accordance with all applicable state and local codes | ✓ |
| | Pipe Insulation | R-3 | ✓ |
| | Central Air Conditioner (split system) ^{7,9} | AHRI Certificate Required. 14.5 SEER / 12 EER. | ✓ |
| | Programmable Thermostat | 5+2 day programmable thermostat including smart thermostat. Limited to one thermostat installed per zone. | ✓ |
| Building Shell | Insulation (attic, wall, floor, band joist, basement, crawl space) | Refer to Insulation Program Policy for homes heated with natural gas or electricity. Must be accompanied by blower door assisted air sealing per BPI and program guidelines. | ✓ |
| | Air Sealing | Supervised by professional; blower door assisted per BPI and program guidelines. | ✓ |
| | Replacement Windows | ENERGY STAR for climate/region. May be subject to SHPO review. | |
| | Storm Windows and Doors | No minimum efficiency requirement. May be subject to SHPO review. | |

| | Movable Window Insulation | ovable Window Insulation R-3 ENERGY STAR for climate/region. May be subject to SHPO review. | |
|-------------------|---|--|--------------|
| | | | |
| | Exterior Doors | | |
| | Exterior Doors | | |
| | Eligible Measures | Minimum Efficiency Requirements | Prequalified |
| | | Tank: 40-100 gallons, EF >= 0.67, FHR >= 67 gallons per hour, <75,000 BTU. ENERGY STAR Qualified | ✓ |
| | Natural Gas | On-Demand: EF >= 0.82, GPM >= 2.5 over a 77°F rise, <2 gallons storage, <200,000 BTU. ENERGY STAR Qualified. Must replace a conventional 40 or 50 gallon tank. | ✓ |
| | Electric | EF .93 | |
| ater ⁸ | | Tank: 20-100 gallons, EF >= 0.67, FHR >= 67 gallons per hour, <75,000 BTU. ENERGY STAR Qualified | ✓ |
| Water Heater | Propane | On-Demand: EF >= 0.82, GPM >= 2.5 over a 77°F rise, <2 gallons storage, <200,000 BTU. ENERGY STAR Qualified | ✓ |
| Wat | Oil | Tank: 20-100 gallons, EF >= 0.67 | ✓ |
| | Indirect-Fired Tank | UL Approved | ✓ |
| | Heat Pump Water Heaters | 50 gallon tank, EF >=.2.2, ENERGY STAR Qualified. Must be installed in an unconditioned space. | ✓ |
| | Pipe Insulation | R-3 | ✓ |
| | Hot Water Tank Insulation - Electric | R-10 | |
| Conservation | Faucet Aerator | No minimum efficiency requirement | ✓ |
| Conser | Low Flow Showerhead | Maximum flow rate of 1.5 gallons per minute. Aerating type showerheads not eligible. | ✓ |
| | Refrigerator | CEE Tier 2 or 3 | ✓ |
| 6 | Freezer | ENERGY STAR Qualified | ✓ |
| | Dishwasher | ENERGY STAR Qualified | |
| Lighting | Clothes washer | ENERGY STAR Qualified | |
| & Li | Dehumidifier | ENERGY STAR Qualified | ✓ |
| | Room Air Conditioner | ENERGY STAR Qualified | ✓ |
| Appliances | CFLs | ENERGY STAR Qualified. Refer to Lighting Guidelines in Contractor Resource Manual (CRM). | ✓ |
| | LEDs | ENERGY STAR Qualified. Refer to Lighting Guidelines in CRM. | ✓ |
| | Light Fixtures | ENERGY STAR Qualified for compact fluorescent, or electronic ballast for fluorescent tubes | |

- Defined as the primary heating system for the space being conditioned. Addition/replacement of secondary heating systems is not eligible. The new unit must be the primary heat for the space being served.
- 2 Duct systems for warm air furnaces, heat pumps and central air conditioners should be tested and sealed to reduce leakage. This will help ensure that the total system will operate efficiently.
- ³In instances where venting conditions require the installation of a non-condensing boiler, boiler reset controls must be included in the project; tank-less coil DHW is not allowed.
- 4 Wood stoves must supply a primary portion of heat.
- 5 Visit www.nyserda.ny.gov/renewableheatny/pelletstoves for qualifications and available incentives. RHNY qualified pellet stoves and inserts are loan pre-qualified for up to \$13,000. See guidance under RHNY documents on the Contractor Support website regarding proper modeling.
- 6 In instances where an area of a home lacks adequate distribution, installation of new distribution to serve the area is eligible. The area lacking adequate distribution must be located within the pre-existing thermal boundary.
- 7 Not eligible for the Assisted Home Performance subsidy.
- 8 Refer to the Fuel Conversion Policy for eligibility of fuel switches
- 9 Measure is only eligible for incentive when there is a replacement of an existing appliance or existing cooling system. Maximum Assisted Subsidy for each appliance is: \$300 for refrigerators and freezers; \$75 for dehumidifiers; and \$50 for room air conditioners. Only the base price of the appliance plus applicable tax is eligible; delivery, set-up, warranties or appliance accessories, and any associated taxes on these items are not eligible for incentives.

Eligible Health & Safety Measures and Accessories

Non-prequalified measures and Health and Safety Measures and Accessories are not eligible for the 50% Assisted Subsidy or contractor incentives.

Smart Energy Loan:

Up to 15%, not to exceed \$2,000, in non-prequalified measures listed in Table 1 and eligible Health & Safety Measures and Accessories in Table 2 may be included in a Smart Energy Loan without additional cost-effectiveness screening.

On-Bill Recovery:

Up to 15%, not to exceed \$2,000, in eligible Health & Safety Measures and Accessories in Table 2 may be included in an On-Bill Recovery Loan subject to cost-effectiveness requirements.

Table 2. Eligible Health & Safety Measures and Accessories

| | Asbestos abatement | Ventilation Fans (Whole house fans or similar attic exhaust fans are not eligible) |
|-----------------------|--|---|
| | Electrical service upgrade necessary when installing a new heating/cooling unit | Repairs/upgrades to heating and/or DHW systems (including power venting kits) to correct spillage, inadequate draft, carbon monoxide failures |
| d Safety | Upgrade of knob and tube wiring in order to install insulation | Measures to provide sufficient combustion air and prevent Combustion Appliance Zone (CAZ) depressurization, spillage or inadequate draft |
| h an | Radon and lead abatement work | Gas leak repair |
| Health and | Cost of removing an oil tank or replacing a faulty oil tank when done in connection with a heating system replacement | Dryer vent repair |
| | Repairs to the home due to water damage, molds and mildew, ice dams or other symptoms of poor building performance, as long as the cause(s) of building performance-related damage are addressed | Heat/Energy Recovery Ventilator |
| S | Attic soffit, gable, or ridge vents | Furnace humidifier |
| 30 ri | Attic storage areas / mechanical access | Chimney liners and caps |
| sess | Attic pull-down stairs | Germicidal UV lights or HEPA filters |
| I Ac | Drywall as thermal barrier for spray foam or air sealing | AC coil when not installed with condenser |
| iffe | Thermal barriers for spray foam | Fuel conversion accessory items |
| Qualified Accessories | Air Cleaners | Oil burner replacement |
| 0 | Additional thermostats | Moisture barriers |

All Health and Safety Measures and Accessories costs must be itemized for the purposes of determining incentive eligibility and loan cost effectiveness. These costs are eligible for incorporation into a Smart Energy Loan or On-Bill Recovery Loan, but are not eligible for the Assisted Subsidy or contractor incentives.

The costs associated with the installation of certain measures can be included in the related energy saving measure. Items such as high hat covers, kneewall wrap, weather stripping, and outlet gaskets can be included with air sealing. Baffles, insulation dams, and creating access to the attic can be included with attic insulation.

INCENTIVES

The Assisted HPwES Program offers income-qualified customers a 50% work scope subsidy of up to \$4,000 for a single-family homes and up to \$8,000 for 2 to 4-family homes. The balance of the project cost is eligible for financing through a Smart Energy or On-Bill Recovery Loan.

Incentive Eligibility

The 50% Assisted Subsidy and contractor incentives are available for customers in the following electric utility territories: Central Hudson, Con Edison, National Grid (NYC and Upstate), NYSEG, Orange & Rockland, and Rochester Gas and Electric. Limited Regional Greenhouse Gas Initiative (RGGI) funds are available for eligible measures for customers of municipal electric utilities and for PSEGLI customers.

The 50% Assisted Subsidy may not be combined with any other utility incentive.

FINANCING OPTIONS

Program Financing is available statewide for all eligible measures that meet the cost-effectiveness standards of the loan product.

The maximum loan amount for the Smart Energy and On-Bill Recovery Loans is \$13,000 per applicant; up to \$25,000 if the payback period is 15 years or less. The minimum loan is \$1,500.

The calculation of cost-effectiveness for the Smart Energy and On-Bill Recovery Loans is based on the amount borrowed by the consumer, net of any customer incentives, including the 50% Assisted Subsidy or utility incentives. Financing charges are included in the cost effectiveness calculation. Customers have the option to "buy down" the project cost so that the financed amount meets the cost effectiveness criteria. The loan terms are 5, 10, or 15 years, but the term may not exceed the average useful life of the financed measures.

Smart Energy Loan

The Smart Energy Loan is available with automatic (ACH) payment, and is repaid in installments to NYSERDA's loan servicer.

Up to 15%, not to exceed \$2,000, in non-prequalified upgrades listed in Table 1 and eligible Health and Safety Measures and Accessories in Table 2 may be included in a Smart Energy Loan without additional cost-effectiveness screening. For those projects where more than 15% of the cost is for items other than those on the Prequalified List, a Savings to Investment Ratio (SIR) greater than .8 is required.

On-Bill Recovery Loan

The On-Bill Recovery Loan is repaid through an installment charge on the customer's utility bill. Upgrades listed in Table 1 and Table 2 may be included in the loan, however the monthly loan installment payment may not exceed $1/12^{th}$ of the estimated annual energy cost savings for the improvements over the loan term. Measures and accessories listed in Table 2 are capped at 15% of the total prequalified measure cost, not to exceed \$2,000.

Renewable Technologies

Solar thermal and solar photovoltaic (PV) systems may be included in a Smart Energy Loan or the On-Bill Recovery Loan, through the NYSERDA Solar Thermal Program or NY-Sun Programs, subject to cost-effectiveness requirements.

*Interest rates and loans terms are subject to change. Full details about all Program Financing are available at http://www.nyserda.ny.gov/residential-financing and in Section 4 of the Contractor Resource Manual.