



FY 2022 New Jersey
Single Family Home Performance with ENERGY STAR®

The is a Core program available to all eligible customers of New Jersey’s Investor Owned Utilities (see page 4).

ELIGIBLE MEASURES (For July 1, 2021 to June 30, 2022)

Home Performance with ENERGY STAR® (HPwES) is designed to transform the way energy efficiency services are delivered to existing 1-4 family homes and low-rise multifamily buildings. To qualify for cash incentives and financing options offered through the Program, all materials and equipment must be purchased new and the energy efficiency improvements must be contracted with a BPI contractor participating in the Program and must meet or exceed the minimum efficiency requirements as specified below. All projects must include air sealing and insulation upgrade each project. Page 2 includes explanation for prioritizing insulation projects. For FY22 HPwES incentives, see page 2 (single family).

| <u>Building Shell</u> | <u>Minimum Requirements</u> ⁵ |
|--|--|
| Air Sealing – Required | Attic and any attached garage air sealed, conducted by participating contractor |
| Attic Floor Insulation – May be Required* | If existing attic floor insulation <7-inches = must install at least 6-inches Meet NJ State code and efficiency requirement |
| Insulation (if proposing an upgrade where no existing insulation): | R-49 - installed R-value of insulation material |
| Attic floor..... | R-49 - installed R-value of insulation material or fill cavity |
| Roof deck (may not be combined with attic floor)..... | R-20 - installed R-value of insulation material (or minimum fill enclosed cavity) |
| Walls- above grade..... | R-19 - installed R-value of insulation material (R-30 climate zone 5 or fill enclosed cavity) |
| Floors | R-10 - installed continuous R-value of insulation material (R-15 climate zone 5) |
| Foundation walls, band joists- basement, crawl space | |
| <u>Ducted Distribution System</u> ⁴ | <u>Minimum Requirements</u> ⁴ |
| Duct Sealing | UL 181 B Mastic; tape is disallowed |
| New Ductwork/ Duct Insulation | Sealed with mastic plus R-8 in attics, all other locations R-6 (except in conditioned) |
| <u>Mechanical Ventilation</u> | <u>Minimum Efficiency Requirements</u> ⁶ |
| Exhaust Ventilation Fans | ENERGY STAR Qualified (must vent to exterior of building shell) |
| Heat/Energy Recovery Ventilator | No minimum efficiency requirement |
| HVAC integrated with fan control and mechanical damper | Installed with eligible furnace installation with ECM/ ICM motor |
| <u>Heating System</u> | <u>Minimum Efficiency Requirements</u> ^{1,2} |
| Furnace – Natural Gas | AFUE 95.0% |
| Steam Boiler – Natural Gas..... | AFUE 82.0% |
| Boiler –Natural Gas | AFUE 90.0% |
| Air Source Heat Pump (Central & Mini Split Systems) ⁷ | 16 SEER / 13 EER / 9 HSPF |
| Ground Source Heat Pump ³ | Open loop 21.1 EER / 4.1 COP Closed loop 17.1 EER / 3.6 COP |
| <u>Cooling Equipment</u> | <u>Minimum Efficiency Requirements</u> ^{1,2} |
| Air Conditioner (Central Ducted Split System) | 16 SEER / 13 EER |
| <u>Water Heater</u> | <u>Minimum Efficiency Requirements</u> ¹ |
| Tank- Natural Gas, power/direct vent (i.e. not Category I venting) | ≤55 gallons & Uniform Energy Factor - UEF ≥0.64 med draw, ≥.68 high |
| Tank- Natural Gas, power/direct vent (i.e. not Category I venting) | >55 gallons & Uniform Energy Factor -_UEF ≥0.78 med draw, ≥.80 high |
| Tankless On-Demand- Natural Gas | <2 gallons & Uniform Energy Factor – UEF ≥0.87 |
| Indirect-Fired Tank (Tier 3 only with a qualifying boiler install) | ≥16 gals., with a minimum of R-5 insulation |
| Heat Pump Water Heaters | Energy Factor - Uniform Energy Factor – ≥2.0 |

Note: ENERGY STAR smart thermostats are not considered a direct measure for consideration in the HPwES energy saving calculation or determination of the HPwES incentive but when installed coincident with an HPwES project, they are eligible for a rebate at the prevailing rebate level noted with the Energy Efficient Products Program.

*All HPwES project must include an insulation measure. If existing attic floor insulation <7-inches must install at least 6-inches. If attic insulation is >7" and framing is exposed, cover framing by 2" and fill in all voids/compression. Weatherstrip and insulated attic access (products with <R-14 do not qualify). Rim joist sealed and insulated to the above grade wall R value or better. Apply a minimum of R-5 to enclose all accessible knee walls. If ducts are outside (garage, vented crawl space or attic) seal and insulate to R-8 in attic, R-6 elsewhere. Insulate crawl walls or ceiling. Insulate basement walls or ceiling (only if unheated and no uninsulated distribution). Insulate exterior walls if no existing insulation is present.

¹ Requires submittal of [AHRI Certificate](#)

² As specified by NJ Code, system selected in accordance with ACCA Manual S based on loads calculated in accordance with ACCA Manual J.

³ Requires submittal of loop design/sizing

⁴ Duct seal of existing ducts requires pre & post pressure pan testing and verification of air flow/ New duct installs require duct pressurization testing @<10% system airflow leakage and verification of airflow

⁵ As specified by the NJ Rehabilitation Code, where no insulation exists, installed insulation R-values must meet IECC 2018 Table R402.1.2 or fill enclosed cavities. Also, must include filling the gap when attic area is floored and gap between existing insulation and flooring >2 inches, all installations must follow code.

⁶ Mechanical ventilation must be installed in compliance with ASHRAE 62.2 2013/16

⁷ Heat pumps installed as supplementing primary heat source must be modeled for the percentage of load served not exceeding the percentage based on weighted capacity of all heating systems in the home

Eligible Measures:

The only measures that may be included in a work scope, be applied toward Total Energy Savings (TES) calculations and be eligible for incentives are those that are listed on and meet the requirements as specified above, approved qualified accessories or health & safety as listed below and are proposed to be newly purchased, provided and installed by a HPwES Participating Building Performance Institute (BPI) contractor. A Participating BPI contractor may subcontract all or a portion of their contracted work scope to any licensed contractor qualified for the work being performed if the Participating BPI contractor oversees the work being performed is in accordance with applicable code and Industry and BPI installation standards. The contract of the full work scope submitted to the NJ HPwES Program is required to be contracted directly with the Participating BPI contractor submitting the project to the program in order to be eligible for incentives. Any portion of a work scope that the customer has agreed to pay to a subcontractor, or any other entity directly is not eligible for Program incentives. All payments must be made to the participating HPwES contractor.

QUALIFIED ACCESSORIES

The costs associated with the installation of qualified accessories for Eligible Measures are eligible for incorporation into financing offered through the Program. These costs can also be included in the portion of the work scope being incentivized through the Home Performance work scope subsidy. Qualified Accessories are only eligible when installed as part of the installation of an associated Eligible Measure under the HPwES Program.

- **Qualified Eligible Accessories Include:** hydronic distribution parts, advanced boiler controls, ductwork, grills, diffusers, chimney liners, mechanical air cleaners, gas piping within the home, and programmable thermostats as part of an installation of an associated eligible DHW or central HVAC system installed as part of the HPwES work scope. Recessed light fixtures that are ICAT Rated and ENERGY STAR qualified are eligible as part of an eligible attic floor insulation upgrade. Service contracts, extended warranties, the initial assessment, and permits, are eligible for incorporation into financing and subsidies offered through the Program.

HEALTH & SAFETY MEASURES

The first \$2,000 of costs associated with any combination of the following Health and Safety Measures is eligible for incorporation into the work scope of projects.

- Smoke, Radon, or Carbon Monoxide Detectors.
- Repairs/upgrades to combustion venting systems and power venting kits, measures to provide sufficient combustion air and prevent Combustion Appliance Zone (CAZ) depressurization, spillage, or inadequate draft.
- Addition of make-up air handlers if not present and necessary to prevent Combustion Appliance Zone (CAZ) depressurization, spillage, or inadequate draft.
- Radon, lead, or asbestos abatement necessary to install eligible measures.
- Electrical service upgrade necessary to replace a heating/cooling unit included in the work scope.
- Upgrade of knob and tube wiring in order to install insulation in the area where knob & tube is present only.
- Crawlspace vapor barriers - installed in accordance with IECC 2015 R402.2.11, grading around foundation and gutter repairs to address water intrusion; and attic passive ventilation.
- Fuel line leak repairs - Permanent repairs, does not include oil tank leak repairs or replacement. The cost of an oil tank replacement when included with an eligible oil heater replacement.
- Exhaust fan and clothes dryer semi-rigid or rigid metal vented to outdoors, R7 insulation in unheated spaces & pitched up to outdoors.
- ENERGY STAR dehumidifier to control source moisture.

FY2022 HPwES INCENTIVES - Single Family & Townhouse Projects:

Customer must have a minimum savings percentage 5% based on modeled reduction of consumption.

Rebates:

Rebate is \$2,000 + \$150 for each percentage point of savings above 5%; Rebate Cap = \$5,000.

All rebates not to exceed 50% of costs.

Contractor Production incentive of up to \$500.

Financing:

Potential for up to \$15,000 at 0% APR. Terms will vary based on value of financing-

- 7- year term for loans up to \$10,000
- 10- year term for loans great than or equal to \$10,000.

Single Family Home Eligibility Requirements

Single family homes and townhouses¹, and residential buildings of 2 to 4 dwelling units (individual living spaces) are eligible for the Home Performance with ENERGY STAR Program. All NJ HPwES projects are required at a minimum to include air sealing and insulation with pre & post blower door testing. If there are any safety issues that preclude blower door testing, the issue must be resolved before project is eligible for participation.

In buildings of 2 to 4 dwelling units, each unit that has separate fuel metering (i.e. a separate electric meter, natural gas meter) and separate HVAC and DHW systems and can be tested individually with pre & post blower door are eligible for participation as a single unit. Any units that share fuel metering or tank, HVAC, or DHW system, or cannot be separately tested with pre & post blower door are eligible for participation as one combined unit.

¹ NJ IRC R202: Townhouse: A single-family dwelling unit constructed in a group of three or more attached units in which each unit extends from foundation to roof and with open space on at least two sides

New Jersey Home Performance with ENERGY STAR® Program Customer Eligibility

All customers and projects must meet all applicable requirements as listed below for Program and incentive eligibility.

Eligibility by Fuel Type

Customers are required to have an IOU account to validate Program eligibility of the project. Please reference the table below of scenarios for customer funding eligibility depending on their heating fuel and electric provider.

| Existing Heat Fuel | New Heat Fuel | Electric Provider | Eligible |
|-------------------------------|---------------|-------------------|---|
| Electric/ Oil/Propane/Nat gas | Natural Gas | IOU | Yes |
| Electric/ Oil/Propane/Nat gas | Electric | IOU | Yes |
| Electric/ Oil/Propane/Nat gas | Natural Gas | Municipal | Eligible for weatherization and gas measures but not electric measures |
| Oil/Propane | Oil/Propane | IOU | Eligible for weatherization and electric measures but not oil/propane equipment |
| Oil/Propane | Oil/Propane | Municipal | Not eligible |
| Electric/Oil/Propane | Electric | Municipal | Not eligible |

Contact your gas or electric utility with any questions.

**Investor Owned Utilities (IOU):



Multi-family Properties may also be eligible to participate in Home Performance with ENERGY STAR. See separate fact sheet regarding Multi-family Programs.