

FY 2015 New Jersey
Home Performance with ENERGY STAR®



ELIGIBLE MEASURES (For Program fiscal year July 1, 2014 to June 30, 2015)

Home Performance with ENERGY STAR® 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 new and the energy efficiency improvements must be contracted, provided, and installed by a BPI accredited contractor participating in the Program and must meet or exceed the minimum efficiency requirements as specified below. All projects must include at least attic air sealing and at least one additional incentive Tier level eligible measure. Incentive Tiers are based on the estimated Total Energy Savings (TES) of the installation of eligible measures. Projects of at least 10% but less than 20% are Tier 2, and projects of at least 20% TES are Tier 3. Tier 2 projects may not include any Heat or A/C equipment measures, Tier 3 projects may include any combination of eligible measures as listed below. A combination of measures from the following list may be financed, with the maximum financed amount being \$10,000 and the minimum being \$2,500.

<u>Building Shell (Tier 2 or 3)</u>		<u>Minimum Requirements</u> ^{6,7}
Insulation (if proposing an upgrade to the following):		NJ State code and efficiency requirement
Attic floor		R-38- final total insulation R-value
Roof deck (may not be combined with attic floor)		R-38 installed R-value of insulation material
Walls- above grade		R-13 installed R-value of insulation material
Floors		R-19 installed R-value of insulation material
Foundation walls, band joists- basement, crawl space		R-10 installed R-value of insulation material
Air Sealing		Attic and any attached garage thoroughly sealed, Conducted by BPI contractor with pre & post blower door testing
<u>Ducted Distribution System (Tier 2 or 3)</u>		<u>Minimum Requirements</u> ^{1,5,8}
Duct Sealing		UL 181 B Mastic; tape is disallowed, submit pre & post leak testing
Duct Insulation		R-8 supplies in attics, all other R-6 (except ducts inside thermal)
<u>Mechanical Ventilation (Tier 2 or 3)</u>		<u>Minimum Efficiency Requirements</u> ⁹
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 2%e motor
Public Gas /Electric Utility	<u>Primary Heating System (Tier 3 only)</u>	<u>Minimum Efficiency Requirements</u> ^{2,3}
	Furnace ¹ – Natural Gas ⁸	AFUE 92.0%
	Boiler ¹ – Hot Water – Natural Gas	AFUE 85.0%
Boiler ¹ – Steam – Natural Gas	AFUE 82.0%	
Air Source Heat Pump (Mini/Central Split System) ⁴	12.0 EER / 14.5 SEER / 8.5 HSPF	
Ground Source Heat Pump ⁴	14.1 EER / 3.3 COP	
<u>Cooling Equipment (Tier 3 only)</u>	<u>Minimum Efficiency Requirements</u> ^{2,3,4}	
Air Conditioner (Mini/Central Split System)	14.5 SEER / 12.0 EER	
<u>Water Heater (Tier 2 or 3)</u>	<u>Minimum Efficiency Requirements</u> ²	
Tank- Natural Gas	Energy Factor (EF) 0.62 + <u>power/direct vent</u> (i.e. not Category I venting)	
On-Demand- Natural Gas	Energy Factor (EF) 0.82 (instantaneous water heaters)	
Indirect-Fired Tank (Tier 3 only)	Installed with eligible boiler, at least 30 gal, R-16	
Heat Pump Water Heaters	Energy Factor ≥ 2.0	
Oil, Propane, Municipal Electric	<u>Primary Heating System- (Tier 3 only)</u>	<u>Minimum Efficiency Requirements</u> ^{2,3}
	Furnace ¹ – Propane ⁸	AFUE 92.0%
	Furnace ¹ – Oil ^{8,9}	AFUE 85.0%
Boiler ¹ – Hot Water – Propane ⁸ /Oil ⁸	AFUE 85.0%	
Boiler ¹ – Steam – Propane ⁸ /Oil ⁸	AFUE 82.0%	
Air Source Heat Pump (Mini/Central Split System) ^{4,8}	12.0 EER / 14.5 SEER / 8.5 HSPF	
Ground Source Heat Pump ^{4,8}	14.1 EER / 3.3 COP	
<u>Cooling Equipment (Tier 3 only)</u>	<u>Minimum Efficiency Requirements</u> ^{2,3,4}	
Air Conditioner (Mini/Central Split System) ⁸	14.5 SEER / 12.0 EER	
<u>Water Heater (Tier 2 or 3)</u>	<u>Minimum Efficiency Requirements</u> ²	
Tank- Propane ⁸	Energy Factor (EF) 0.62 <u>power vent</u> (i.e. positive vent pressure)	
On-Demand- Propane ⁸	Energy Factor (EF) 0.82 (instantaneous water heaters)	
Indirect-Fired Tank (Tier 3 only)	Installed with qualifying boiler, at least 30 gal, R-16	
Heat Pump Water Heaters	Energy Factor ≥ 2.0	

¹ Requires BPI Heating Certification
² Requires submittal of AHRI Certificate, CEE Directory, or ENERGY STAR listing as verification of system efficiency
³ Installed system cooling capacity must be sized within 115% for A/C or 125% for Heat Pump of cooling load calculation following ACCA Manual J procedures
⁴ Refrigerant based systems require BPI AC/Heat Pump Certification and must be served by IOU electric utility
⁵ Requires submittal of pre & post duct pressurization testing for duct work outside the thermal envelope and post system airflow testing
⁶ Requires BPI Envelope Certification and submittal of pre & post blower door testing when required per BPI Standards
⁷ When proposing insulation for enclosed cavities, the installed insulation should meet the listed R-values or at a minimum fill the cavity
⁸ Oil/Propane and Municipal Electric (OPM) served equipment upgrades are eligible until June 30, 2015 or until SEP funds are fully exhausted- check Portal
⁹ Mechanical ventilation must be installed in compliance with ASHRAE 62.2 2013

FINANCING OPTIONS

Home Performance with ENERGY STAR offers a 50% work scope incentive of up to \$5,000. The balance of the cost, up to \$10,000, can be financed at 0% interest rate but specific features and requirements vary. For the purpose of calculating the maximum rebate and financing amounts, the contractor shall use the cost of the project minus any other available incentives such as manufacturer rebates and/or discounts.

QUALIFIED ACCESSORIES

The costs associated with the installation of qualified accessories for Eligible Measures are eligible for incorporation into a 0% interest rate 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, and programmable thermostats as part of an installation of an associated eligible DHW or central HVAC system (e.g. hydronic parts with an eligible boiler) 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 for Tier 2 or Tier 3 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.
- Radon, lead, or asbestos abatement necessary to install eligible measures.
- Electrical service upgrade necessary to install the new heating/cooling unit.
- Upgrade of knob and tube wiring in order to install insulation in the area where knob & tube is present only.
- Crawlspace vapor barriers - Minimum 6-mil plastic, 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 removal when included with an eligible heater replacement of an oil heater.
- Clothes dryer semi-rigid or rigid metal vented to outside with R-7 insulation in unheated space. Exhaust ducts same insulation & pitched up to outside.
- 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 being addressed.

SEP (State Energy Program) FUNDING

The funding for incentives for oil, propane, and municipal electric served homes is limited. Always check the contractor portal on the Clean Energy Program website or NJHPHelp@csgroup.com for the current availability of SEP funds.

Incentives:

Requirements	Customer Incentives
10% TES or greater: Must install air sealing and address health & safety issues, with the option of installing insulation upgrades, domestic hot water (DHW), duct sealing and/or duct insulation measures, with estimated TES of at least 10% and less than 20%.	<ul style="list-style-type: none"> • \$2,000 rebate, not to exceed 50% of the costs of the Eligible Measures listed on previous page to calculate TES and • 0% interest financing or repayment plan up to \$5,000
20% TES or greater: Must install air sealing and address health & safety issue and install at least one additional measure from the Eligible Measure list, including insulation, HVAC or water heater, with estimated TES of at least 20% and less than 25%.	<ul style="list-style-type: none"> • \$4,000 rebate, not to exceed 50% of the costs of the Eligible Measures listed on previous page to calculate TES and • 0% interest financing or repayment plan up to \$10,000
25% TES or greater: Must install air sealing and address health & safety issues and install at least one additional measure from the Eligible Measure list, including insulation, HVAC or water heater, with estimated TES of at least 25%.	<ul style="list-style-type: none"> • \$5,000 rebate, not to exceed 50% of the costs of the Eligible Measures listed on previous page to calculate TES and • 0% interest financing or repayment plan up to \$10,000

Eligible Measures:

The only measures that may be included in a work scope, be applied toward TES calculations and be eligible for incentives are those that 1) are listed on and meet the requirements of the HPwES Eligible Measures document, 2) are approved by the NJ Clean Energy Program and 3) are proposed to be provided and installed by a HPwES Participating Building Performance Institute (BPI) accredited contractor. A Participating BPI contractor may subcontract all or a portion of their contracted work scope to any contractor that has the requisite BPI certification(s) for the work being performed or to any contractor if the Participating BPI contractor has the requisite BPI certification(s) and oversees the work being performed. The contract of the full work scope submitted to the NJ Home Performance with ENERGY STAR 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.

New Jersey
Home Performance with ENERGY STAR® Program
Customer Eligibility

Eligibility Requirements

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

• **Eligibility by Fuel Type**

Each fiscal year a portion of the State Energy Program (SEP) funds are allocated for oil/propane/municipal electric (OPM) customers under the NJ HPwES program. When/if these funds are depleted, the SEP-funded Home Performance with ENERGY STAR incentives are no longer available; contractors need to check the Clean Energy Program (CEP) website for funding availability.. When SEP funds are depleted, only customers served by or converting their heat fuel to a natural gas or electric investor-owned utility (IOU)** are eligible to participate in the Program for cash-back incentives and 0% interest financing.

Investor-Owned Utility (IOU) Natural Gas or Electric Eligibility Requirements

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	Funding Source
Natural Gas	Natural Gas	IOU or Municipal	CEP
Oil/Propane/Other	Natural Gas	IOU or Municipal	CEP
Oil/Propane/Other	Oil/Propane/Other	IOU with existing Central Air	CEP
Oil/Propane/Other	Oil/Propane/Other	IOU <u>without</u> existing Central Air	SEP
Oil/Propane/Other	Oil/Propane/Other	Municipal	SEP
Oil/Propane/Other	Electric	IOU	CEP
Electric	Electric	IOU	CEP
Electric	Electric	Municipal	SEP
Electric	Natural Gas	Municipal	CEP

• **Eligibility by Housing Type**

○ **Single Family Home Eligibility Requirements**

Single family homes and townhouses, and residential buildings of 2 to 4 dwelling units (individual living spaces) are eligible for the Home Performance with ENERGY STAR Program, which have a primary heating fuel of natural gas, electric, oil, or propane. All NJ HPwES projects are required at a minimum to include air sealing 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. Each single-family unit may include up to 1,000 cfm50 reduction towards the total energy savings calculations. A townhouse is a single-family dwelling unit constructed in groups of three or more attached units in which each unit extends from foundation to roof and with open space on at least two sides.

- 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/or propane or oil tank) 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, HVAC, or DHW system, or cannot be separately tested with pre & post blower door are eligible for participation as one combined unit. The whole building is eligible to include up to 1,000 CFM50 reduction toward total energy savings calculations. If the building is done as separate projects, each project is eligible to include the savings of 1,000 cfm50 divided equally by number of units in the building. For example: a building of 4 units with two units sharing a heating system, with the other two units meeting the separate requirements above, the project is eligible as 3 projects and each may include the savings for 333 cfm50 reduction.

- **Multi-Family Eligibility Requirements**

The EPA has determined that small multi-family (MF) building developments may participate in HPwES. The NJ HPwES program defines eligibility as buildings that are less than three stories high, have single ownership, and where total building energy usage is accessible (through individual metering of the units within the multi-family structure, or a master meter at the building), with a primary heating fuel of natural gas , electric, oil or propane.

For the purposes of the New Jersey Home Performance with ENERGY STAR program, a multi-family building is eligible to participate in the program if it is made up of five or more dwelling units in a single building, or multiple buildings (each with five or more units), within a single geographic boundary and with a single property management structure, but no more than three stories high and with energy usage data available at the individual unit or at a building level (as opposed to sites with two or more buildings heated by a central heating plant or serviced by a common utility meter). Multi-family facilities that do not meet this criteria fall into the Commercial & Industrial (C&I) program for Energy Efficient measures. Each unit is eligible to include a reduction in air leakage toward the total energy savings calculations based on 1,000 cfm50 x the number of units with an attic space directly above, divided equally by the number of units in the building. For example: a building with 6 units with an attic space and a total of 14 dwelling units: $6,000 / 14 = 429$ cfm50 per unit.

- **Measure Eligibility (see page 2)**

When SEP funding is depleted, the following SEP funded measures are not eligible within the Program; these measures are only eligible when SEP funding is available. When SEP funding is depleted, the measures and any cost associated with the measures listed below may not be entered into Real Home Analyzer (RHA), cannot be included in energy savings calculations, cannot be included within the project cost and are not eligible for cash-back incentives and/or program financing. Please refer to the updated **FY 2015 NJ HPwES Eligible Measures List** on page 1 of this document. .

- **SEP Funded Measures:**

<u>Oil or Propane</u>	<u>Municipal Electric</u>
<ul style="list-style-type: none"> - Heating Equipment - Heat-Only duct system upgrades - DHW Equipment 	<ul style="list-style-type: none"> - Central Air Conditioning Equipment - Air Conditioning or heat pump Only Duct system upgrades - Air Source Heat Pump - Ground Source Heat Pump - Heat Pump DHW

**** Investor Owned Utilities (IOU):**

- Atlantic City Electric (ACE)
- South Jersey Gas (SJG)
- Public Service Electric & Gas (PSE&G)
- Jersey Central Power & Light (JCP&L)
- New Jersey Natural Gas (NJNG)
- Elizabethtown Gas
- Rockland Electric Company

New Jersey Home Performance with ENERGY STAR[®]

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