





## **ELIGIBLE MEASURES** (For Program fiscal year July 1, 2017 to June 30, 2018)

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 purchased new and the energy efficiency improvements must be contracted with a BPI GoldStar 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 insulation, if required as defined below for each dwelling unit. For FY18 HPwES incentives, see tables on page 2 (single family) and page 4 (multi-family).

Building Shell (Tier 2 or 3)		Minimum Requirements <sup>5</sup>	
Attic Floor Required		If existing insulation <7-inches = must install at least 6-inches	
Air Sealing Required		Attic and any attached garage air sealed, Conducted by participating contractor  Meet NJ State code and efficiency requirement  R-49- installed R-value of insulation material	
Roof deck (may not be combined with attic floor)		R-49 installed R-value of insulation material	
Walls- above gradeFloors		R-20 installed R-value of insulation material (or minimum fill enclosed cavity) R-19 installed R-value of insulation material (R-30 climate zone 5)	
Foundation walls, band joists- basement, crawl space		R-10 installed continuous R-value of insulation material (R-15 climate zone 5)	
Ducted Distribution System <sup>6</sup> (Tier 2 or 3)		Minimum Requirements 4	
Duct Sealing		UL 181 B Mastic; tape is disallowed	
New Ductwork/ Duct Insulation		R-8 in attics, all other locations R-6 (except ducts inside thermal)	
	al Ventilation (Tier 2 or 3)	Minimum Efficiency Requirements <sup>-7</sup>	
	entilation Fans	ENERGY STAR Qualified (must vent to exterior of building shell)	
	gy Recovery Ventilator	No minimum efficiency requirement	
HVAC inte	grated with fan control and mechanical damper	Installed with eligible furnace installation with ECM/ ICM motor	
	Primary Heating System (Tier 3 only)	Minimum Efficiency Requirements 1,2	
	Furnace – Natural Gas	AFUE 92.0%	
	Boiler – Hot Water – Natural Gas	AFUE 85.0%	
_	Boiler – Steam – Natural Gas	AFUE 82.0%	
€	Air Source Heat Pump (Mini/Central Split System) <sup>4</sup>	12.0 EER / 14.5 SEER / 8.5 HSPF	
ņ	Ground Source Heat Pump <sup>3</sup>	Open loop 21.1 EER / 4.1 COP Closed loop 17.1 EER / 3.6 COP	
ctri	Cooling Equipment (Tier 3 only)	Minimum Efficiency Requirements 1,2	
/Ele	Air Conditioner (Mini/Central Split System)	14.5 SEER / 12.0 EER	
Public Gas /Electric Utility	Water Heater (Tier 2 or 3)	Minimum Efficiency Requirements <sup>1</sup>	
ij	Tank- Natural Gas, power/ direct vent (i.e. not Category I venting)	≤55 gallons & Energy Factor -EF 0.67 / Uniform Energy Factor - UEF 0.64, or greater	
Δ.	Tank- Natural Gas, power/direct vent (i.e. not Category I venting)	>55 gallons & Uniform Energy Factor UEF 0.85, or greater	
	Tankless On-Demand- Natural Gas	<2 gallons & Energy Factor -EF 0.82 / Uniform Energy Factor – UEF 0.79, or greater	
	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 - EF 2.0 / Uniform Energy Factor – UEF 2.0, or greater	
	Solar Water Heater	Energy Star Certified (OG-300 SRCC rating, SF>=0.5)	
	Primary Heating System <sup>6</sup> - (Tier 3 only)	Minimum Efficiency Requirements 1,2	
	Furnace – Propane <sup>,</sup>	AFUE 92.0%	
	Furnace – Oil	AFUE 85.0%	
U	Boiler – Hot Water – Propane/Oil	AFUE 85.0%	
Ě	Boiler – Steam – Propane/Oil	AFUE 82.0%	
<u>ë</u>	Air Source Heat Pump (Mini/Central Split System)	12.0 EER / 14.5 SEER / 8.5 HSPF	
pal E	Ground Source Heat Pump <sup>3</sup>	Open loop 21.1 EER / 4.1 COP Closed loop 17.1 EER / 3.6 COP	
Oil, Propane, Municipal Electric	Cooling Equipment <sup>6</sup> (Tier 3 only) Air Conditioner (Mini/Central Split System)	Minimum Efficiency Requirements <sup>1,2</sup> 14.5 SEER / 12.0 EER	
	Water Heater <sup>6</sup> (Tier 2 or 3)	Minimum Efficiency Requirements <sup>1</sup>	
	Tank – Oil		
	Tank - Propane, power/direct vent (i.e. not Category I venting)	Energy Factor -EF 0.62 / Uniform Energy Factor – UEF 0.62, or greater ≤55 gallons & Energy Factor -EF 0.67 / Uniform Energy Factor - UEF 0.64, or greater	
	Tank - Propane, power/direct vent (i.e. not Category I venting) Tankless On-Demand - Propane	>55 gallons & Uniform Energy Factor UEF 0.85, or greater <2 gallons & Energy Factor -EF 0.82 / Uniform Energy Factor – UEF 0.79, or greater	
	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 - EF 2.0 / Uniform Energy Factor – UEF 2.0, or greater	
	Solar Water Heater rtificate, CEE Directory, or ENERGY STAR listing as verification of system efficiency	Energy Star Certified (OG-300 SRCC rating, SF>=0.5)	

# <sup>7</sup> Mechanical ventilation must be installed in compliance with ASHRAE 62.2 2013

#### **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.

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<sup>&</sup>lt;sup>2</sup> Installed system capacity must be sized utilizing load calculation following ACCA Manual J and equipment selected following ACCA Manual S procedures

Requires submittal of loop design/sizing

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

<sup>&</sup>lt;sup>5</sup> As specified by the NJ Rehabilitation Code, where no insulation exists, installed insulation R-values must meet IECC 2015 Table R402.1.2 or fill enclosed cavities

<sup>6</sup> Oil/Propane and Municipal Electric (OPM) served equipment upgrades are eligible until June 30, 2018 or until SEP funds are fully exhausted - check Portal for updates on remaining FY 2018 funding.

• 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 and coverable/sealable pull-down stair kits to replace rigid attic ladders 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 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 removal when included with an eligible heater replacement of an oil heater.
- Clothes dryer semi-rigid or rigid metal vented to outdoors. Exhaust ducts R7 insulation in unheated spaces & pitched up to outdoors.
- ENERGY STAR dehumidifier to control source moisture.

## FY2018 HPwES INCENTIVES - Single Family & Townhouse Projects:

INCENTIVE TIER	REQUIREMENTS	CUSTOMER INCENTIVE	
Tier 1	Energy audit only	No incentives	
Tier 2	Estimated total energy savings from all work must total at least 5% but less than 20%.  Must install air sealing.	Cash rebate of 50% of the costs of the measures used to calculate TES up to \$2,000.  0% financing, 7-year term, up to \$5,000 where a utility financing offer is unavailable.	
Tiel 2	Must install insulation in at least one location.  May also install water heater measures from the Eligible Measures  List. Heating and A/C equipment is not eligible.		
Tier 3	Level 1.  Estimated total energy savings from all work must total at least 20% but less than 25%.  Must install air sealing.  Must install insulation in at least one location.  May include additional measures from the Eligible Measures List.	Cash rebate of 50% of the costs of the measures used to calculate TES up to \$3,000.  Either 0% financing, 7-year term, up to \$10,000 or 4.99% financing, 10-year term, up to \$15,000, where a utility financing offer is unavailable.	
	Level 2.  Estimated total energy savings from all work must total at least 25%.  Must install air sealing.  Must install insulation in at least one location. May include additional measures from the Eligible Measures List.	Cash rebate of 50% of the costs of the measures used to calculate TES up to \$4,000.  Either 0% financing, 7-year term, up to \$10,000 or 4.99% financing, 10-year term, up to \$15,000, where a utility financing offer is unavailable.	

## 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) GoldStar 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 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.

# 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

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

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available; contractors need to check the Clean Energy Program (CEP) website for funding availability. When SEP funds are depleted, only customers <u>served by or converting their heat fuel to</u> 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/	Natural Gas	IOU or Municipal	CEP
Oil/Propane	No new equipment installed - remaining Oil/Propane	IOU with existing Central Air	СЕР
Oil/Propane	Oil/Propane- new equipment	IOU with or with <u>out</u> existing Central Air	SEP
Oil/Propane	Oil/Propane	Municipal	SEP
Electric/Oil/Propane	Electric	IOU	СЕР
Electric/Oil/Propane	Electric	Municipal	SEP
Electric Natural Gas		Municipal	CEP

## Eligibility by Housing Type

## Single Family Home Eligibility Requirements

Single family homes and townhouses<sup>1</sup>, 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 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. Each single-family unit may include a 25% cfm50 reduction, or 1,000 cfm50 (whichever is less) 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 a 25% cfm50 reduction, or 1,000 cfm50 (whichever is less) toward total energy savings calculations. If the building is done as separate projects, each project is eligible to include the savings above 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.

## O 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.

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 Page 3 of 4

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## FY2018 HPWES INCENTIVES - Multi-Family Projects:

INCENTIVE TIER	REQUIREMENTS	CUSTOMER INCENTIVE	
Tier 1	Energy audit only	No incentives	
	Estimated total energy savings from all work must total at least5% but less than 15%.	Cash rebate of 50% of the costs of the measures used to calculate TES up to \$500 per unit.	
Tier 2	Must install air sealing.  Must install insulation in at least one location.		
	May also install duct sealing, duct insulation, and water heater measures from the Eligible Measures List. Heating and A/C equipment is not eligible.		
	Level 1.	Cash rebate of 50% of the costs of the measures used to calculate TES up to \$1,000 per unit.	
	Estimated total energy savings from all work must total  at least 15% but less than 20%.  Must install air sealing.		
	Must install insulation in at least one location.		
Tier 3	May include additional measures from the Eligible Measures List.		
	Level 2.		
	Estimated total energy savings from all work must total at least 20%.	Cash rebate of 50% of the costs of the measures used to calculate TES up to \$1,500 per unit.	
	Must install air sealing.		
	Must install insulation in at least one location.		
	May include additional measures from the Eligible Measures List.		

## • 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 Program software, 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 2018 NJ HPWES Eligible Measures List** on page 1 of this document.

## SEP Funded Measures:

Oil or Propane	Municipal Electric
- Heating Equipment	- Central Air Conditioning Equipment
<ul><li>Heat-Only duct system upgrades</li><li>DHW Equipment</li></ul>	- Air Conditioning or heat pump Only Duct system upgrades
	- Air Source Heat Pump
	- Ground Source Heat Pump
	- Heat Pump DHW

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

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

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