

# Residential Eligible Improvements

*Financing is available to Indiana homeowners, including low- to moderate-income and credit-challenged borrowers, through approved lenders and contractors participating in the Smart-E Loan program. Eligible improvements include the home energy efficiency, renewable energy and resiliency projects listed below. This list is subject to change, and improvements are subject to the minimum efficiency ratings and the specified additional requirements.*

| Energy-Efficient HVAC                           |                                                                                  |                                                                                                                                                     |
|-------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Measure                                         | Minimum Efficiency Rating                                                        | Additional Requirements                                                                                                                             |
| Air source heat pump                            | SEER2 $\geq$ 14.2                                                                |                                                                                                                                                     |
| Boiler: combination                             | AFUE $\geq$ 95%, water heating $\geq$ 0.87 UEF                                   |                                                                                                                                                     |
| Boiler: steam                                   | AFUE $\geq$ 82%                                                                  |                                                                                                                                                     |
| Central air conditioning                        | SEER2 $\geq$ 15.2                                                                |                                                                                                                                                     |
| Combined heat & power (micro CHP)               |                                                                                  |                                                                                                                                                     |
| Controls: zone heating                          |                                                                                  | Limited to 25% of total amount financed                                                                                                             |
| Ductless mini-split heat pump                   | SEER2 $\geq$ 14.2                                                                |                                                                                                                                                     |
| Electric heat pump water heater                 | FHR 45, UEF $\geq$ 2.8                                                           |                                                                                                                                                     |
| Hot water boiler: natural gas or propane        | AFUE $\geq$ 95%                                                                  |                                                                                                                                                     |
| Indirect water heater: natural gas              |                                                                                  |                                                                                                                                                     |
| Natural gas storage or condensing water heater  | UEF for tanks < 55 gallons $\geq$ 0.81 UEF<br>for tanks > 55 gallons $\geq$ 0.86 |                                                                                                                                                     |
| Oil tank removal                                |                                                                                  | Financing can be used for oil tank removal when coupled with a qualifying boiler, furnace, or water heater. Limited to 25% of total amount financed |
| On-demand tankless water heater: natural gas    | Energy factor (EF) $\geq$ 0.90                                                   |                                                                                                                                                     |
| On-demand tankless water heater: propane        | Energy factor (EF) $\geq$ 0.90                                                   |                                                                                                                                                     |
| Smart meter                                     |                                                                                  | Limited to 25% of total amount financed                                                                                                             |
| Thermostat: programmable or Wi-Fi enabled       |                                                                                  | Limited to 25% of total amount financed                                                                                                             |
| Warm air furnace: natural gas or propane        | AFUE $\geq$ 97%                                                                  |                                                                                                                                                     |
| Water heater: solar thermal                     |                                                                                  |                                                                                                                                                     |
| Geothermal: Water-to-air heat pump: closed loop | COP $\geq$ 3.6, EER $\geq$ 17.1                                                  |                                                                                                                                                     |

|                                                   |                                 |  |
|---------------------------------------------------|---------------------------------|--|
| Geothermal: Water-to-air heat pump: open loop     | COP $\geq$ 4.1, EER $\geq$ 21.1 |  |
| Geothermal: Water-to-water heat pump: closed loop | COP $\geq$ 3.1, EER $\geq$ 16.1 |  |
| Geothermal: Water-to-water heat pump: open loop   | COP $\geq$ 3.5, EER $\geq$ 20.1 |  |
| Geothermal: Weather-responsive controls           |                                 |  |

## Insulation

| Measure                        | Minimum Efficiency Rating         | Additional Requirements                                                   |
|--------------------------------|-----------------------------------|---------------------------------------------------------------------------|
| Air sealing                    | Pre- and post-blower door 5 ACH50 | Requires pre-and post- installation blower door test for air sealing work |
| Duct insulation                | R-value $\geq$ R8                 |                                                                           |
| Duct sealing                   | Post-CFM values, CFM 25/100ft = 4 |                                                                           |
| Exterior doors                 | ENERGY STAR®                      |                                                                           |
| Green roofing (living roof)    |                                   |                                                                           |
| Insulated mobile home skirting | R-Value $\geq$ R7                 |                                                                           |
| Insulated vinyl siding         | R-value $\geq$ R3                 |                                                                           |
| Insulation: attic              | R-value $\geq$ R38                |                                                                           |
| Insulation: floor              | R-Value $\geq$ R13                |                                                                           |
| Insulation: wall               | R-Value $\geq$ R15                |                                                                           |
| Skylights                      | U-Factor $\leq$ 0.60              |                                                                           |
| Windows                        | U-factor 0.35                     |                                                                           |

## Lighting and Electrical

| Measure                                                                                  | Minimum Efficiency Rating | Additional Requirements                 |
|------------------------------------------------------------------------------------------|---------------------------|-----------------------------------------|
| Electrical System Upgrades or other repairs needed for building electrification or solar |                           | Limited to 25% of total amount financed |
| Electric vehicle (EV) charging station                                                   | Level 2                   |                                         |
| LED Lighting and Controls                                                                |                           | Limited to 25% of total amount financed |

## Roofing, Windows, Doors

| Measure                           | Minimum Efficiency Rating | Additional Requirements |
|-----------------------------------|---------------------------|-------------------------|
| Tile, shingle, metal              |                           |                         |
| Roof repair and reinforcement     |                           |                         |
| Roof soffit vent sealing/flashing |                           |                         |
| Reflective roofs and green roofs  |                           |                         |
| Windows and exterior doors        | ENERGY STAR®              |                         |

## Renewable Energy

| Measure                 | Minimum Efficiency Rating | Additional Requirements                                                 |
|-------------------------|---------------------------|-------------------------------------------------------------------------|
| Battery storage         |                           |                                                                         |
| Direct geexchange       | COP ≥ 3.6, EER ≥ 16       |                                                                         |
| Solar photovoltaic (PV) |                           | The panels, inverter, and meter should be approved by the local utility |
| Wind turbines           |                           |                                                                         |

## ENERGY STAR® Appliances

| Measure                                                                                                | Minimum Efficiency Rating | Additional Requirements |
|--------------------------------------------------------------------------------------------------------|---------------------------|-------------------------|
| ENERGY STAR® appliances: dishwasher, freezer (chest or upright), heat pump dryer, refrigerator, washer | ENERGY STAR®              |                         |

## Disability & Accessibility Upgrades

| Measure                      | Minimum Efficiency Rating | Additional Requirements |
|------------------------------|---------------------------|-------------------------|
| Assistive Technologies       |                           |                         |
| Doorway and hallway widening |                           |                         |
| Stair lifts                  |                           |                         |
| Walk-in tubs and showers     |                           |                         |
| Wheelchair ramps             |                           |                         |

## Health and Safety

| Measure                                    | Minimum Efficiency Rating | Additional Requirements                                                                                                                                  |
|--------------------------------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Air filtration for air quality             | ENERGY STAR®              | Limited to 25% of total amount financed                                                                                                                  |
| Asbestos abatement (including vermiculite) |                           | Financing can be used for asbestos remediation when coupled with a qualifying boiler, furnace, or water heater                                           |
| Lead abatement                             |                           | Limited to 25% of total amount financed                                                                                                                  |
| Mold and mildew removal                    |                           | Financing can be used for lead abatement when coupled with a qualifying building shell improvement                                                       |
| Radon abatement                            |                           | Financing can be used for radon abatement when coupled with a qualifying building shell improvement. Limited to 25% of total amount financed             |
| Structural remediation                     |                           | Limited to 25% of total amount financed                                                                                                                  |
| Wiring: knob and tube upgrade              |                           | Financing can be used for rewiring a home to meet building code when it prevents the installation of insulation. Limited to 25% of total amount financed |

## Water Efficiency, Septic & Sewer Improvements

| Measure                                                                | Minimum Efficiency Rating | Additional Requirements                 |
|------------------------------------------------------------------------|---------------------------|-----------------------------------------|
| Low flow fixtures: bathroom faucet, kitchen faucet, showerhead, toilet |                           | Limited to 25% of total amount financed |
| Septic to sewer conversion                                             |                           |                                         |
| Septic tank repair and replacement                                     |                           |                                         |
| Sewer to lateral line replacement                                      |                           |                                         |
| Irrigation, sprinkler heads, drip irrigation                           |                           |                                         |
| Rain barrels                                                           |                           |                                         |
| Water remediation                                                      |                           |                                         |

**Other Possible Measures:** “Other” measures are limited to 25% financing

| Measure                                                                                    | Minimum Efficiency Rating | Additional Requirements                                                                       |
|--------------------------------------------------------------------------------------------|---------------------------|-----------------------------------------------------------------------------------------------|
| Low flow fixtures: bathroom faucet, kitchen faucet, showerhead, toilet                     |                           | Limited to 25% of total amount financed                                                       |
| Tree removal                                                                               |                           | Tree Removal can be financed when coupled with Solar. Limited to 25% of total amount financed |
| Unlisted but relevant to improving the energy performance, safety, or resiliency of a home |                           |                                                                                               |
| Whole home generator: Gas or Electric                                                      | EPA Compliant             |                                                                                               |

# Legend

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>AFUE</b>             | The annual fuel utilization efficiency is a thermal efficiency measure of space-heating furnaces and boilers. Furnaces are rated by the AFUE ratio, the percentage of heat produced for every dollar of fuel consumed. The higher the AFUE rating, the lower the fuel costs. Any furnace with an efficiency of 90 percent or higher is considered high efficiency and carries the ENERGY STAR® label.                    |
| <b>Btu</b>              | The British thermal unit is a traditional unit of heat, defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.                                                                                                                                                                                                                                                  |
| <b>CEE</b>              | The Consortium for Energy Efficiency creates product specifications for advanced levels of energy performance. A CEE tier-one label is the equivalent of the ENERGY STAR® label. Products with CEE tier-two, three, or four labels would represent products that achieve energy savings above and beyond the ENERGY STAR® label.                                                                                         |
| <b>COP</b>              | The coefficient of performance of a heat pump, refrigerator, or air conditioning system is a ratio of useful heating or cooling provided to the work required. Higher COPs equate to lower operating costs.                                                                                                                                                                                                              |
| <b>EER</b>              | The energy efficiency ratio measures how much cooling a system puts out for each unit of energy it consumes. EER is calculated by dividing an air conditioning unit's Btu rating by its wattage. The higher the EER rating, the more efficiently the air conditioner operates. Any air conditioning unit with an efficiency of 12 EER or higher is considered a high-efficiency unit and carries the ENERGY STAR® label. |
| <b>EF</b>               | The energy factor indicates a water heater's overall energy efficiency based on the amount of hot water produced per unit of fuel consumed over a typical day. The higher the energy factor, the more efficient the water heater.                                                                                                                                                                                        |
| <b>ENERGY<br/>STAR®</b> | ENERGY STAR® is a government program promoting energy-saving improvements by providing consumers with objective product information. The ENERGY STAR® label indicates that a product uses less energy than other products in that category.                                                                                                                                                                              |
| <b>GPM</b>              | Gallons per flush measures the flow from a showerhead or faucet. The lower the GPM, the greater the water savings.                                                                                                                                                                                                                                                                                                       |



# Legend

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LED      | Light-emitting diodes are up to 80 percent more efficient than traditional lighting, such as fluorescent and incandescent lights. 95 percent of the energy in LEDs is converted into light, and only 5 percent is wasted as heat.                                                                                                                                                                                                |
| Level 2  | Level 2 charging refers to the voltage the electric vehicle charger uses (240 volts). Level 2 chargers come in various amperages, typically ranging from 16 amps to 40 amps. The most common level 2 chargers are 16 and 30 amps, which also may be referred to as 3.3 kilowatt (kW) and 7.2 kW, respectively. These two amperages are the most common because they match the onboard charger on many current electric vehicles. |
| LPW      | Lumens per watt measures the efficacy of a light source. LED bulbs and fixtures have higher LPW values than other lighting technologies.                                                                                                                                                                                                                                                                                         |
| R-value  | An insulating material's resistance to conductive heat flow is measured or rated in terms of its thermal resistance or R-value. The higher the R-value, the greater the insulation's effectiveness.                                                                                                                                                                                                                              |
| SEER     | The seasonal energy efficiency ratio measures how much cooling a system puts out for each unit of energy it consumes. The higher the SEER rating, the more efficiently the air conditioner operates. Any air conditioning unit with an efficiency of 15 SEER or higher is considered a high-efficiency unit and carries the ENERGY STAR® label.                                                                                  |
| SF       | The solar factor measures the percentage of heat that passes through a solar panel's glass. The higher the solar factor, the greater the solar gain for solar-thermal water heating units.                                                                                                                                                                                                                                       |
| SHGC     | The solar heat gain coefficient is the fraction of incident solar radiation admitted through a window, both directly transmitted and absorbed and subsequently released inward. SHGC is expressed as a number between zero and one. The lower a window's solar heat gain coefficient, the less solar heat it transmits.                                                                                                          |
| TE       | Thermal efficiency is an efficiency measure for space-heating boilers that exceed 300,000 Btu per hour, in lieu of the AFUE rating. TE is also used to measure the efficiency of gas-fired water heaters that exceed 75,000 Btu per hour.                                                                                                                                                                                        |
| U-factor | The rate of heat loss of a window assembly is indicated in terms of the U-factor (U-value). The lower the U-factor, the greater a window's resistance to heat flow and the better its insulating properties.                                                                                                                                                                                                                     |
| UEF      | The Uniform Energy Factor (UEF) is the standard measure of a water heater's overall efficiency. The higher the UEF rating, the more efficient the water heater.                                                                                                                                                                                                                                                                  |