# 2023-2032 HVAC System Tax Credits and Rebates

Helping to Build the Clean Energy Economy



#### Inflation Reduction Act

- \$370 Billion Investment
- Signed into law August 16, 2022
- The most significant action Congress has taken on clean energy and climate change in the Nation's history



#### Inflation Reduction Act

- Lower energy costs for families and small businesses
- Accelerate private investment in clean energy solutions in every sector of the economy and every corner of the country
- Strengthen supply chains for everything from critical minerals to efficient electric appliances
- Create good-paying jobs and new economic opportunities for workers.



## Inflation Reduction Act – HVAC Specific

#### Energy Efficiency Home Improvement Credit

- Up to \$3,200 annually in tax credits to lower the cost of energy efficient upgrades by up to 30 percent.
- Includes the purchase of heat pumps, insulation, efficient doors and windows, electrical panel upgrades, and energy audits.
- Heat pumps alone can save households up to \$500 in energy costs every year.

#### High Efficiency Electric Home Rebate Act

- Nearly \$9 billion will be available to states and Tribes for consumer home energy rebate programs.
- Enables communities to make homes more energy efficient, upgrade to electric appliances, and cut energy costs.



#### **Energy Efficiency Home Improvement Credit**

• Federal Agency : Department of the Treasury

• IRA Section : 13301

• Tax Code Section : 25C

Tax Mechanism : Consumer Tax Credit

Period of Availability : 2022 – 2032

Direct Pay Eligible : No

Stackability : No rules



#### **Energy Efficiency Home Improvement Credit**

- Tax credit for energy-efficiency improvements of residential homes.
- Base Credit Amount is 30% of cost, with limits for each type of improvement and total per year.
  - Credit capped at \$600 for "energy property," e.g., efficient heating and cooling equipment
  - \$150 credit for home energy audits
  - \$600 for windows
  - \$250 per door
  - \$500 total for doors
  - \$2,000 for heat pumps
  - Total annual credit capped at \$1,200, with a separate annual \$2,000 limit for heat pumps

#### Eligible Home Improvements

- Residential energy property (30% of costs, including labor, up to \$600 for each item) satisfying the energy efficiency requirements specified by the Department of the Treasury
  - Central air conditioners
  - Natural gas, propane, or oil water heaters
  - Natural gas, propane, or oil furnaces and hot water boilers
  - Improvements to or replacements of panelboards, sub-panelboards, branch circuits, or feeders that are installed along with building envelope components or other energy property listed



#### Eligible Home Improvements

- A separate aggregate yearly amount of up to \$2000 applies to the below improvements
- Heat pumps and biomass stoves and biomass boilers (30% of costs, including labor, up to \$2000) satisfying the energy efficiency requirements specified by the Department of the Treasury
  - Electric or natural gas heat pump water heaters
  - Electric or natural gas heat pumps
  - Biomass stoves and biomass boilers



#### Eligible Home Improvements

- Building envelope components satisfying the energy efficiency requirements specified by the Department of the Treasury
  - Exterior doors (30% of costs up to \$250 per door, up to a total of \$500)
  - Exterior windows and skylights (30% of costs up to \$600)
  - Insulation materials or systems and air sealing materials or systems (30% of costs)
- Home energy audits (30% of costs up to \$150, see Q5 under General Questions section)



#### **Energy Efficiency Home Improvement Credit**

AC Only	Furnace Only	Heat Pump System	AC w/ Furnace	Heat Pump w/ Furnace
30% (Up to \$600)	30% (Up to \$600)	30% (Up to \$2000)	30% (Up to \$1200)*	30% (Up to \$2600)*

\* 30% of each piece of equipment individually could combine to equal up to the listed amount



## Example 1

- In one taxable year, a taxpayer purchases and installs
  - two exterior doors at a cost of \$1,000 each, windows and skylights at a total cost of \$2,200, and one central
    air conditioner at a cost of \$5,000. All property installed meets the applicable energy efficiency and other
    requirements for qualifying.
  - 30% of each \$1,000 door's costs is \$300, reduced to limit of \$250 per door with a maximum credit of \$500.
  - 30% of the taxpayer's total \$2,200 of expenditures for windows and skylights is \$660, reduced to the maximum credit of \$600.
  - 30% of the taxpayer's \$5,000 cost paid for the central air conditioner is \$1,500, reduced to the maximum credit of \$600
- The total amount is \$1,700 (\$500 + \$600 + \$600), but the aggregate limit of \$1,200 applies to limit the taxpayer's total amount of Energy Efficient Home Improvement Credit to \$1,200.

#### Example 1

- In one taxable year, a taxpayer purchases and installs
  - Two exterior doors at a cost of \$1,000 each
  - Windows and skylights at a total cost of \$2,200
  - One central air conditioner at a cost of \$5,000
  - All property installed meets the applicable energy efficiency and other requirements for qualifying



#### Example 1 – Tax Benefit

- The total amount is \$1,700 (\$500 + \$600 + \$600), but the aggregate limit of \$1,200 applies to limit the taxpayer's total amount of Energy Efficient Home Improvement Credit to \$1,200
  - 30% of each \$1,000 door's costs is \$300, reduced to limit of \$250 per door with a maximum credit of \$500
  - 30% of the taxpayer's total \$2,200 of expenditures for windows and skylights is \$660,
     reduced to the maximum credit of \$600
  - 30% of the taxpayer's \$5,000 cost paid for the central air conditioner is \$1,500, reduced to the maximum credit of \$600



#### Example 2

- In one taxable year, a taxpayer purchases and installs the following:
  - Two exterior doors at a cost of \$1,000 each
  - Windows and skylights at a total cost of \$2,200
  - One heat pump at a cost of \$5,000
  - All property installed meets the applicable energy efficiency and other requirements for qualifying



#### Example 2 – Tax Benefit

- The total amount is \$2,600 (\$500 + \$600 + \$1500)
  - 30% of each \$1,000 door's costs is \$300, reduced to limit of \$250 per door with a maximum credit of \$500
  - 30% of the taxpayer's total \$2,200 of expenditures for windows and skylights is \$660,
     reduced to the maximum credit of \$600
  - 30% of the taxpayer's \$5,000 cost paid for the heat pump is \$1,500, which is not reduced since it is below the maximum credit of \$2000



- Must meet or exceed the highest efficiency tier (not including any advanced tier) established by the Consortium for Energy Efficiency (CEE) that is in effect as of the beginning of the year in which the property is placed in service.
- ✓ Electric or natural gas heat pumps
- ✓ Electric or natural gas heat pump water heaters
- ✓ Central air conditioners

- ✓ Natural gas or propane or oil water heaters
- ✓ Natural gas or propane or oil furnaces or hot water boilers



**Central Air Conditioners** 

**CEE Tier 2** 

16.0 SEER2

12.0 EER2

Packaged Central Conditioners

**CEE Tier 1** 

15.2 SEER2

11.5 EER2

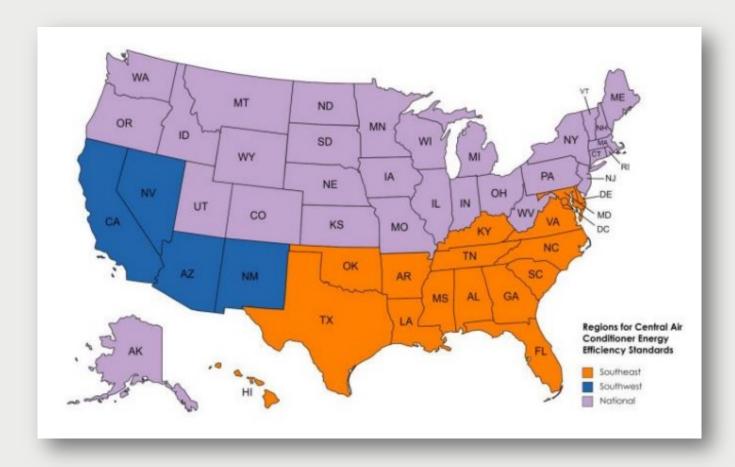
Forced Air Gas Furnaces

**CEE Tier 3** 

**97% AFUE** 



Heat Pump systems are being qualified differently based on DOE Climatic Regions





- Air Source Heat Pumps North and Canada
  - Split Ducted ASHP

CEE Tier 1	15.2 SEER2	10.0 EER2	8.1 HSPF2	1.75 COP @ 5*F	58% Capacity
					@ 17*F/47*F

Non-Ducted ASHP

CEE Tier 2	16.0 SEER2	9.0 EER2	9.5 HSPF2	1.75 COP @ 5*F	58% Capacity
					@ 17*F/47*F

Packaged ASHP

CEE Tier 1	15.2 SEER2	10.0 EER2	8.1 HSPF2	1.75 COP @ 5*F	58% Capacity
					@ 17*F/47*F



- Air Source Heat Pumps South and Southwest
  - Split Ducted ASHP

CEE Tier 1	15.2 SEER2	11.7 EER2	7.8 HSPF2

Non-Ducted ASHP

CEE Tier 2 15.2 SEER2 12.0 EER2 9.0 HSPF2
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Packaged ASHP

CEE HEI 1 15.2 SEERZ 10.0 EERZ 7.2 HSFFZ	CEE Tier 1	15.2 SEER2	10.6 EER2	7.2 HSPF2
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## High Efficiency Electric Home Rebate Act

Federal Agency : Department of Energy

• IRA Section : 50122

• Funding Amount : \$4,500,000,000.00

• Funding Mechanism : Grant

Period of Availability: Through September 30, 2031

Eligible Recipients : States and Tribal Entities

Fund Administer : State Level



## High Efficiency Electric Home Rebate Act

- The HEEHRA is very much a work in progress
- Federal agencies including the IRS, EPA, and DOE will create the rules and regulations for distributing the money, but the individual states will be directly involved in implementing the program.
- Definitive details will most likely not be available until the end of Q2-2023
- Funding should be available to the States and Tribes by Spring-2023 with rebates being available to the public later in the year



## High Efficiency Electric Home Rebate Act

#### What we know:

Income Eligibility and Cost Covered	
Low Income = < 80% AMI*	100%
Moderate Income = 80-150% AMI*	50%

<sup>\*</sup>AMI = Area Median Income

Rebates for Qualified Projects	
Heat Pump HVAC	\$8000
Heat Pump Water Heater	\$1750
Electric Stove/Cooktop	\$840
Heat Pump Clothes Dryer	\$840
Breaker Box	\$4000
Electric Wiring	\$2500
Weatherization (Insulation, Air Sealing, Ventilation)	\$1600





#### THANK YOU

#### www.ecmdi.com

