

# USE IT OR LOSE IT: ELECTRIFY YOUR HOME BEFORE FEDERAL INCENTIVES EXPIRE



Building Electrification  
Webinar  
September 18, 2025  
Steve and Pat Miller



SCAN ME



REQUEST AN ELECTRIFICATION COACH.  
FREE HELP; CERTIFIED BY REWIRING AMERICA

# Carolina Beach, North Carolina

September 16, 2024



Ten days before Hurricane Helene in Carolina Beach, a once 18 inches of rain/year fell in 12 hours. soaked North Carolina.



# Asheville, North Carolina

October 3, 2024





# Westville, New Jersey

June 20, 2019





# Kincade Fire, Jintown, California

October 24, 2019



**The Kincade fire grew to over 16,000 acres within 24 hours.**

# Fossil Fuels are the Problem

## ■ Burning fossil fuels impacts our climate, air quality, and household energy costs

- 3 sectors produce 77% of all Greenhouse Gas emissions in NJ
  - Electricity generation (18%)
  - Transportation (35%)
  - Residential/commercial buildings (24%)
- Pollutants from burning fossil fuels contribute to smog and acid rain
- Health risks associated with burning fossil fuels include asthma and cancer
- Worldwide, air pollution from fossil fuels kills 8.7 million people every year [K Vohra, et al., *Environmental Research*, 2021]

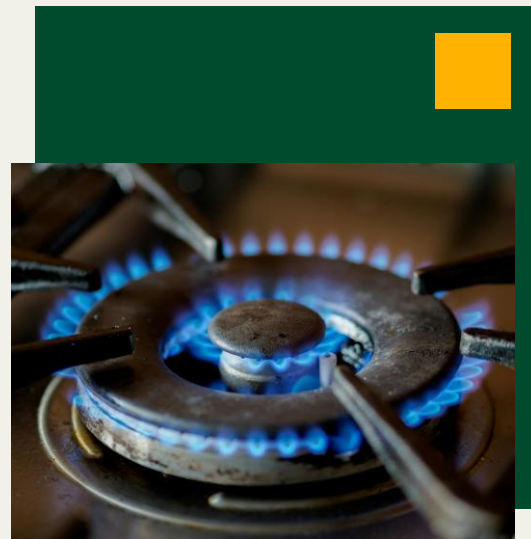






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AP Images



Photo © Shutterstock



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**We have the technologies in hand today  
to reduce emissions 50% in this decade.**



Photo © Shutterstock



Photo © Shutterstock



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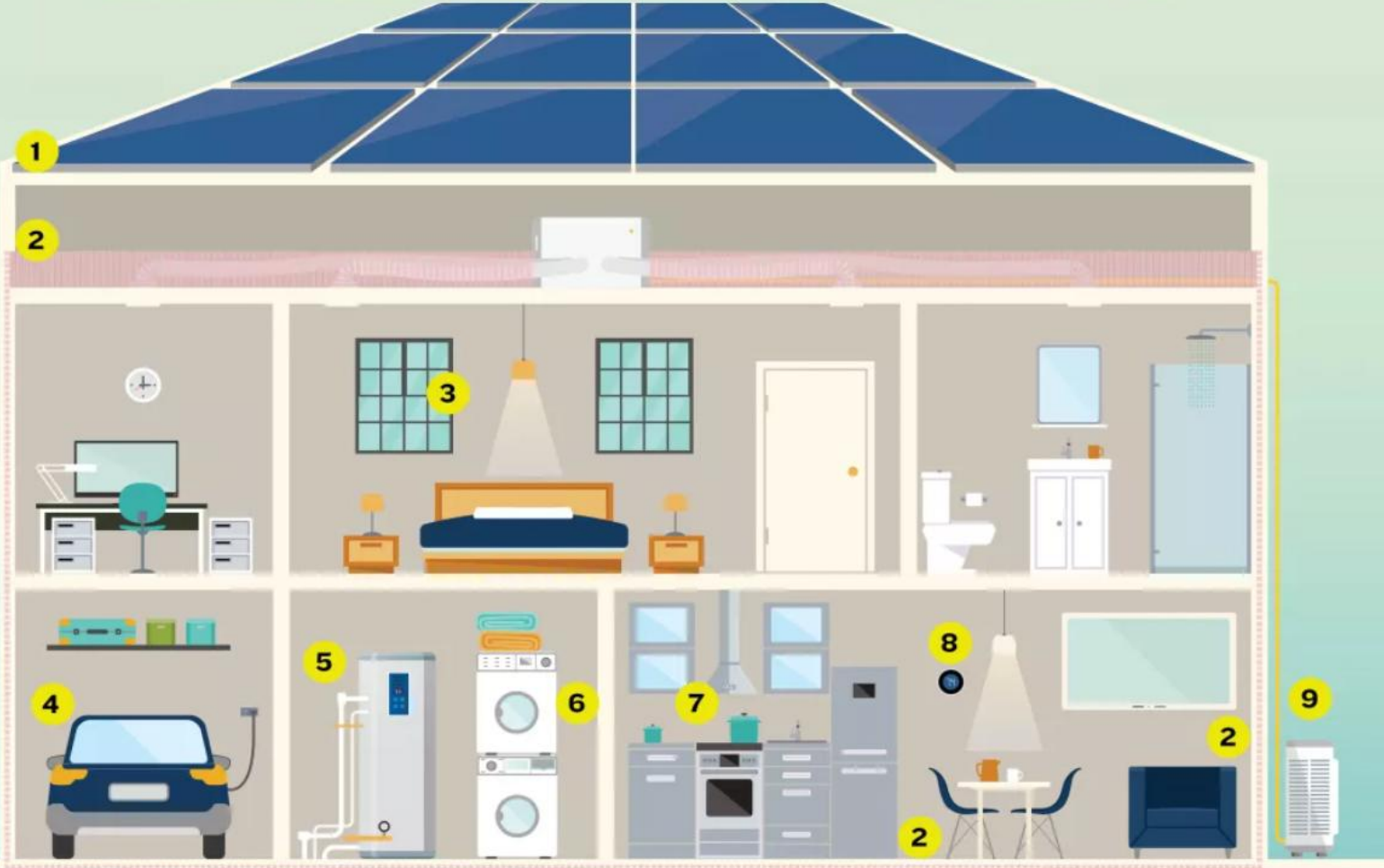


Photo © Shutterstock

# ZEROING OUT HOME CARBON EMISSIONS

- 1. Solar Panels
- 2. Insulated Walls, Floors and Attic
- 3. Energy Efficient Windows & Doors
- 4. Electric Car
- 5. Heat Pump Water Heater
- 6. Heat Pump Dryer
- 7. Induction Stove
- 8. Smart Thermostat
- 9. Heat Pump Heating and Cooling

CREDIT: NRDC





# COMMUNITY SOLAR



Clean Energy

Lower Energy  
Costs

No Panels on  
Your Property

**BPU/Sustainable Jersey Community Solar**

[www.sustainablejersey.com/communitysolar](http://www.sustainablejersey.com/communitysolar)

# OUR EV – PRIUS PRIME PLUG-IN





# Federal IRA Tax Incentives Are Going Away

- |   |                |
|---|----------------|
| • For EVs (\$7500 new EV, \$4000 used EV)             | Expire 9/30/25 |
| • Rooftop Solar (30% of cost, no cap)                 | 12/31/25       |
| • Electric Panel                                      | 12/31/25       |
| • Energy Efficiency Weatherization (30% up to \$1200) | 12/31/25       |
| • Heat Pump HVAC or Water Heater (30% up to \$2000)   | 12/31/25       |
| • EV Charger (30%)                                    | 6/30/26        |
| • Commercial (Church) Rooftop Solar                   | 6/30/26        |

IRA Rebates, through state programs TBA, were NOT repealed. In most states funding was awarded but programs have been on Hold. They will now go forward and are expected to be income-limited.

# WHAT TO DO NOW?

**We leased a new EV. Buy or lease a car off the lot and drive it home in 2 days. Get Federal + NJ incentives.**





**OUR FIRST  
ELECTRIFIED  
APPLIANCE  
REPLACEMENT –  
CERAMIC STOVETOP**



**Induction cooktops heat using  
a magnetic current. The result  
is evenly heated pots and  
pans with much less  
energy lost during  
cooking.**



Soup Water Fry Hot Pot Stir-Fry

Temp.



Power

Photo © Shutterstock



Timer/Pre.



Child Lock



Elec./Volt.



Function



ON/OFF





# Experimental Induction Stovetop 1 Burner Portable Induction Hot Plate - \$109.



# Energy Efficiency – Use Less Energy





# A SIMPLE DO-IT-YOURSELF PROJECT

## DUCT SEALING

**CAULKING  
CORD**

**PRESSURIZED  
FOAM  
FOR LARGE GAPS**

**ALUMINUM  
FOIL TAPE  
TO SEAL JOINTS  
IN INSULATION**

**DUCT SEALANT  
WATER BASE**



**REFLECTIVE  
BUBBLE WRAP**

**WRAP  
AIR DUCTS IN  
UNHEATED AREAS**

# HOME PERFORMANCE WITH ENERGY STAR\*\*

## NJ & Nation-wide Weatherization Program

South Brunswick, NJ	May 11, 2023
Install 50 Gallon Heat Pump Water Heater w. UEF of 3.88	\$5,460
Shell Test & Seal Incl. Applicable Air Seal Top-Plates & Penetrations	\$2,960
Attic Hatch Insulated to R-13	\$275
Attic Stair Cover Insulated to R-13	\$475
4" of Dense-Packed Cellulose in Exterior Walls R-13, 564 Sq Ft	\$3,412
4" of Dense-Packed Cellulose in Garage Buffered Walls R-13, 267 Sq Ft	\$1,775
Audit Refund (\$99)	(\$99)
 Total Project Cost	 \$14,258
<b>Rebate to Ciel Power, LLC</b>	<b>\$5,000</b>
Balance Due Upon Completion of Project	\$9,258*

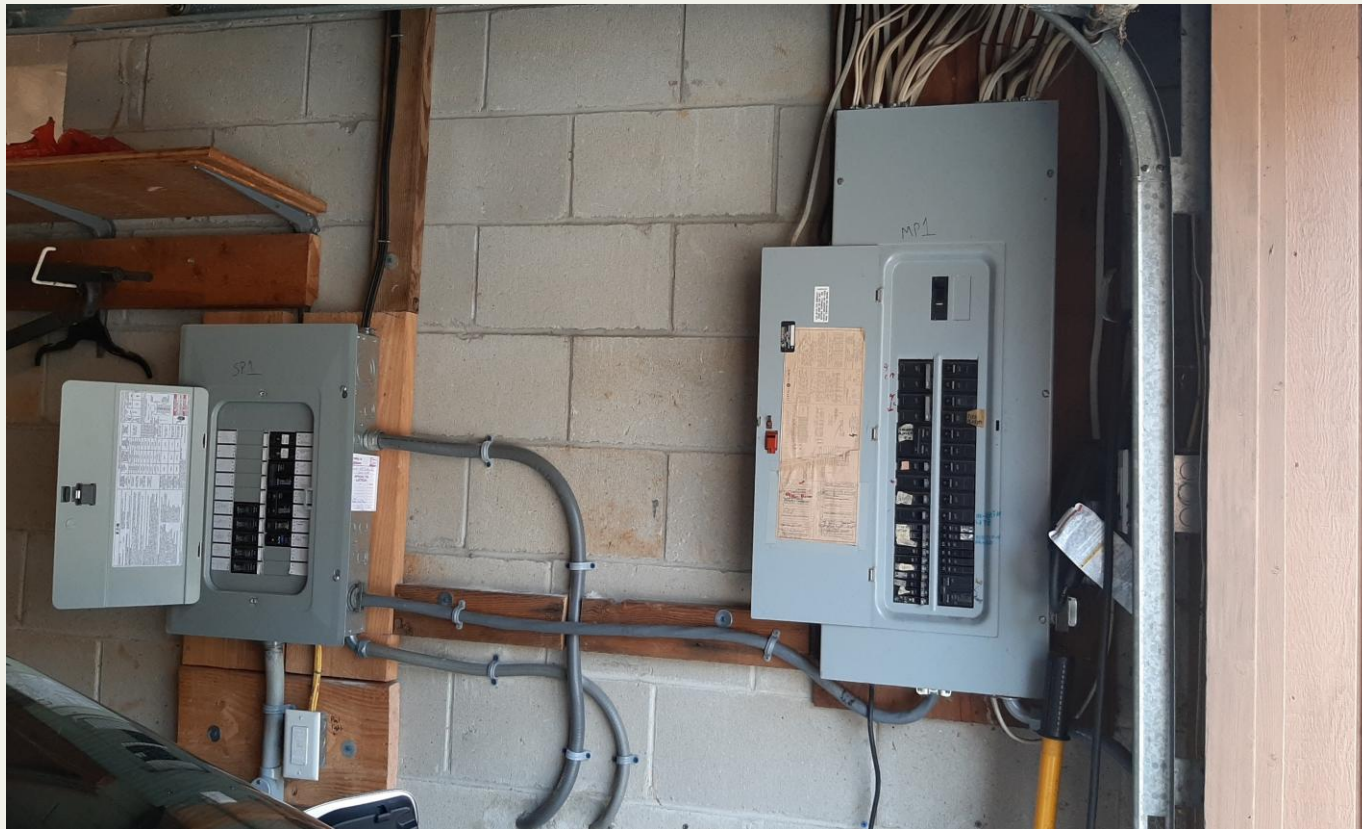
\* Can be paid with PSE&G 0% On-Bill Repayment

Project qualifies for a \$5,000 rebate to contractor through NJ HPwES Program

\*\* HPwES is now replaced with Whole Home Energy Solutions Program



# Spare Circuits for Future Electric Appliances



**New Box on Left  
for New/Future**

- **2<sup>nd</sup> Heat  
Pump Space  
Heater/AC**
- **Stove**
- **2<sup>nd</sup> EV**

# SPACE HEATING & COOLING WITH ELECTRIC HEAT PUMP

## Gas Furnace Backup on Right





# Shop for a New Cold Climate Heat Pump or HPWH

## Ducted System:

One Mitsubishi hyper heat pump model PUZ-AK30NLHZ and one ducted air handler model PVA-AA30NL together producing up to 30,000 BTU's of cooling at 21 SEER2/13.5 EER2 and 32,000 BTU's of heating at 5 degrees ambient and 9.3 HSPF2/ 2.3 COP5. Included is freon reclamation, new refrigeration tubings, plenum modifications, one Mitsubishi wireless wall mounted thermostat, one heat pump stand, one condensate pump and emergency condensate switch, and the disposal of the existing equipment.

**Total Price: \$23,855.00 Less PSEG instant rebate of \$450.00: \$23,405.00**

One 30 amp 220V circuit will be needed (this could be adapted from the existing 25 amp condensing unit circuit)

System is warrantied for 12 years on parts and one year on labor.

Permit fees, scheduling of the required inspections and line voltage wiring are not included.

Qualify for a \$2000.00 Federal Tax Credit providing you owe that much or more on your 2025 taxes.

Qualify for PSEG's 0% 84 month \$25,000 loan (with credit approval)

## *Consideration:*

Your duct is most likely undersized on the supply side for moving the 1000 CFM needed at normal static pressures. Expect some air noise and perhaps a degradation in performance.

# ELECTRIC HEAT PUMP WATER HEATER





# HEAT PUMP COMBO WASHER/DRYER



# How NJ Electrification Coaching Network Can Help

- We offer education, resources and electrification coaches
  - Provide free one-on-one advice when you sign up for an individual home electrification coach
  - Host a webinar or in-person talk on home electrification for community groups, Green Teams or local officials
  - Provide access to our incredible database of webinars, presentations, and home electrification case studies
  - Up-to-date articles on electrification on our NJ ECN Substack

*Remember: Electrified homes are healthier and more comfortable –  
No gas leaks, no combustion byproducts, better indoor air quality,  
stable temperature and humidity*



# NJ Electrification Coaching Network's Resources

■ The goal is to reduce GHG in NJ. NJ ECN offers resources for building a clean energy economy.

- Coaching request Intake Form <https://tinyurl.com/yc2ew6rc>
- BE Webinar Database <https://climate.smiller.org/50x30/building-electrification/All-heat-pump-webinars.html>
- NJ ECN Substack <https://njecn.substack.com/>
- Rewiring America <https://www.rewiringamerica.org/> for Personal Electrification Planner, IRA Incentive Tracker or to sign up for EC training

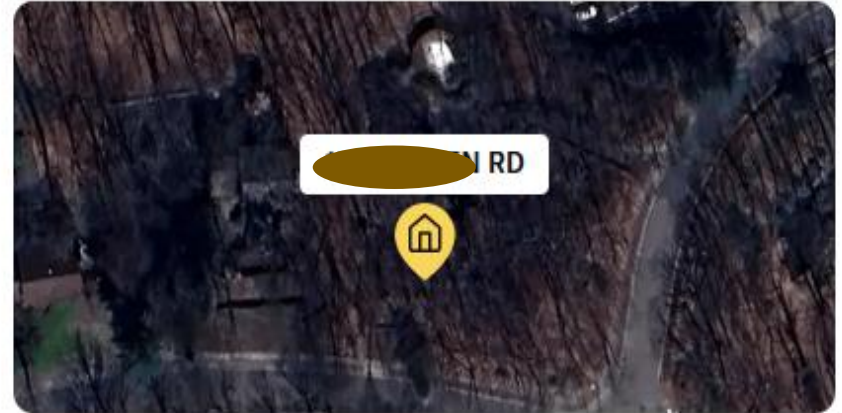




# Create a Home Electrification Plan with Rewiring America

[Plan your next electric upgrade today  
\(rewiringamerica.org\)](https://rewiringamerica.org)

My home



ADDRESS

15 [REDACTED] Idletown  
Township, NJ 07748, USA

OWNERSHIP STATUS

I Own My Home

HOME TYPE

House

[My plan](#)[My projects](#) [Settings](#)

# My electrification plan

I'm electrifying to:



LOWER MY ENERGY BILLS



LOWER MY CLIMATE IMPACT

[EDIT](#)



## Pework

[HOW TO READ MY PLAN](#) | [HOW THE DATA WORKS](#)



Get a home energy audit

BILL IMPACT

None

[View project](#)



Pre-wire your home to get it ready






BILL IMPACT

None



[View project](#)



# MY ELECTRIFICATION PLAN: Projects



[My plan](#) [My projects](#) [Settings](#)

<input type="checkbox"/>		Install solar panels	BILL IMPACT	▼ ~\$1,300/yr	<a href="#">View project</a>
<input type="checkbox"/>		Upgrade to a heat pump and weatherize	BILL IMPACT	▼ ~\$940/yr	<a href="#">View project</a>
<input type="checkbox"/>		Upgrade to an all-electric vehicle 	BILL IMPACT	▼ ~\$630/yr	<a href="#">View project</a>
<input type="checkbox"/>		Purchase an electric lawn mower	BILL IMPACT	N/A	<a href="#">View project</a>

### Completed projects

  Water heating electrified! [View project](#)

  Dryer electrified! [View project](#)

  Electric stove installed! [View project](#)



# Upgrade your heating and cooling with a heat pump

[INTRODUCTION](#)[COSTS & BENEFITS](#)[REBATES & CREDITS](#)[PROJECT GUIDE](#)[CONTRACTORS](#)[LEARN MORE](#)

The best way to heat your home in the winter and cool your home in the summer is with a heat pump. Heat pumps are more energy efficient than other heating and cooling systems like gas furnaces, oil heat, and central air.

## ⚡ WHY DO IT?

Homes with heat pumps use less energy and save money on their utility bills.

## ⚡ WHEN?

When your current HVAC unit is nearing end of life (usually about 15 years).

## ⚡ WHO IS THIS FOR?

Whole-home heat pump systems for homeowners; portable and window units for renters.



## Weatherization

Weatherizing your home can save you hundreds on your energy bills by reducing the amount of energy needed to keep your home comfortable. Weatherization projects include air sealing, insulation, and upgrades to doors and windows.

# Calculate your potential IRA electrification incentives with Rewiring America

<https://homes.rewiringamerica.org/calculator>

AMI: [HUD Area Median Income](#)

Homeowners ▾

Renters ▾

Incentive calculator

Find contractors

## YOUR SAVINGS CALCULATOR

### See how much you could save on electric appliance upgrades

There are many savings programs for energy-efficient appliances and upgrades.  
Enter your household info to see the programs you're eligible for.

#### Your household info

Reset

We're dedicated to safeguarding your privacy. [Learn more.](#)

##### RENT OR OWN ⓘ

Homeowner ▾

##### ZIP ⓘ

07748

##### ELECTRIC UTILITY ⓘ

Jersey Central Power & Light ▾

##### HOUSEHOLD INCOME ⓘ

\$105,000

##### TAX FILING ⓘ

Married filing jointly ▾

##### HOUSEHOLD SIZE ⓘ

2 people ▾

View results

We found 18 results across 9 projects.

# References for Energy Efficiency and Electrification Incentives

Rewiring America Incentive Calculator (Federal and State)

[Household electrification incentives calculator from Rewiring America](#)

Federal Clean Energy Programs

<https://www.energystar.gov/about/federal-tax-credits>

<https://www.irs.gov/credits-deductions/energy-efficient-home-improvement-credit>

NY Times: How Can I Get Clean Energy Tax Breaks Before They Vanish?

[https://www.nytimes.com/2025/07/15/climate/clean-energy-tax-credits-uses.html?unlocked\\_article\\_code=1.mU8.AZrJ.4RXRt7C3ASPu](https://www.nytimes.com/2025/07/15/climate/clean-energy-tax-credits-uses.html?unlocked_article_code=1.mU8.AZrJ.4RXRt7C3ASPu)

New Jersey EV and EV-charging Incentives

<https://chargeup.njcleanenergy.com/#howmuchsave>

New Jersey Solar, Battery Storage and Offshore Wind Incentives

<https://www.njcleanenergy.com/renewable-energy>

Links to NJ Energy Efficiency Programs Run by NJ Clean Energy Programs or Utilities, e.g., Existing Buildings: Equipment Upgrades & In-Store Discounts, or Appliance Rebates

<https://www.njcleanenergy.com/EEP>

<https://www.njcleanenergy.com/residential/UTILITY>



# IRA TAX CREDITS FOR MODERATE INCOME HOUSEHOLDS

Category	Project	Amount	Annual Cap	IRS Code
Battery	Battery storage	30% of cost	Uncapped (Avg \$4,800)	Fed Res Clean Energy Credit 25D
EV	New EV	\$7,500	Cars max MSRP \$55,000 Truck/van max \$80,000	Fed Clean Vehicle Credit 30D
EV	Used EV	30% of cost	Cap \$4,000 max MSRP \$25,000	Fed Credit Prev-Owned EV 25E
Elec Panel/Wiring	Elec Panel	30% of cost	Cap \$600; must accompany 2nd 25C or 25D upgrade	Fed Energy Effic Home Improvement 25C
Heating, Vent, Cooling	Geothermal Heat Install	30% of cost	Uncapped (Avg \$7,200)	Fed Res Clean Energy Credit 25D
Heating, Vent, Cooling	Air Source Heat Pump	30% of cost	Cap \$2,000	Fed Energy Effic Home Improvement 25C
Solar	Rooftop Solar	30% of cost	Uncapped (Avg \$4,600); includes panel upgrade	Fed Res Clean Energy Credit 25D
Water Heater	Heat Pump Water Heater	30% of cost	Cap \$2,000	Fed Energy Effic Home Improvement 25C
Weatherization	Insulation, Air Sealing, etc	30% of cost	Cap \$1,200	Fed Energy Effic Home Improvement 25C
Weatherization	Energy Audit	100% of cost	Cap \$150	Fed Energy Effic Home Improvement 25C

\* Many items can be supplemented by state/utility rebates in Triennium 2 as of 2025.

# NJ UTILITY TRIENNIUM 2 INCENTIVES FOR ELECTRIC HP EQUIPMENT

## For Replacement of Existing HP Equipment as of 2025

Program	Project	Amount (Up to)
Energy Efficiency Products (EEP) Heat Pump (HP)	Air Source Heat Pump (non-cold climate ASHP)	\$750
	Cold Climate Air Source Heat Pump (ccASHP)	\$2,000
	Ductless Mini-Split	\$750
	Ground Source (Geothermal) Heat Pump	\$10,000
	Heat Pump Water Heater	\$750

# NJ UTILITY TRIENNIUM 2 RESIDENTIAL BUILDING DECARBONIZATION (BD) INCENTIVES – HEAT PUMP as of 2025

Heat Pump	Project	Amount	Cap
Air Source Heat Pump (ASHP)	Full Displacement - ccASHP	50% of installed cost Mod Income (MI): 60%	\$10,000, MI: \$12,000 (Adder \$2000 each reducing, decommissioning)
	Full Displacement-Dual Fuel – ccASHP	50% of installed cost MI: 60%	\$5000, MI: \$6000 – Must include integrated controls
	Full Displacement-Additional ASHP Units	Full BD incentive for 1 <sup>st</sup> unit	Add'l HP units \$2000 per ccASHP, \$750 per ASHP
	Partial Displacement - ASHP	Non-ccASHP: 30% MI: 40%	\$2000, MI: \$3000 – Must include integrated controls
Ground Source Heat Pump (GSHP)	Full Displacement	Gas Cust: 50% of cost Deliv'd Fuel Cust: 50% MI: 60%	Gas \$4000/10K BTUh Deliv \$5000/10K BTUh MI: \$6000/10K BTUh

\* \$ values are “Up to.” Additional conditions apply.



# NJ UTILITY TRIENNIUM 2 RESIDENTIAL BUILDING DECARBONIZATION (BD) INCENTIVES – OTHER as of 2025

Other Products	Description	Amount “Up to” \$ Value
Heat Pump Water Heater	240V or 120 V	\$750 per unit
Packaged Terminal Heat Pump	PTHP	\$5000
Electric Lawn Equipment	Lawnmower – Push or ride	\$75
	Snow Blower	\$50
	Leaf Blower	\$50
	String Trimmer	\$50
	Chainsaw	\$50
Heat Pump Clothes Dryer	Energy Star	\$400
Induction Stove		\$400 (LMI \$600)
Heat Pump Pool Heater		\$2000
Custom	Other complex system	\$300
Whole Home Program	Weatherization first through Whole Home	\$1000
	Multi-end use bonus	\$750
Electrification Readiness	Panel Upgrades	\$4000 for panel + \$2500 for wiring (for income-qualified cust not doing BD)
Income Eligible Program	Core electric and electric-ready measures	Full Cost

# FINANCING WITH 0% LOAN

- **Utility Energy Efficiency Programs offer a 0% financing option for EE projects that include Building Decarbonization projects.**
- **“On Bill Replacement” means that the monthly bill will include utility energy use cost plus loan payment. The intent is that the reduction in energy use should cover the loan payment amount.**
- **Amount of loan depends on project size and program. Ranges from \$10,000 to \$25,000. Term is from 5 to 10 years.**
- **Under these terms, monthly payment can be from about \$119 to \$298 per month.**