

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



Climate Reality Project
NJ Chapter
November 18, 2025
Steve and Pat Miller



SCAN ME



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

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]

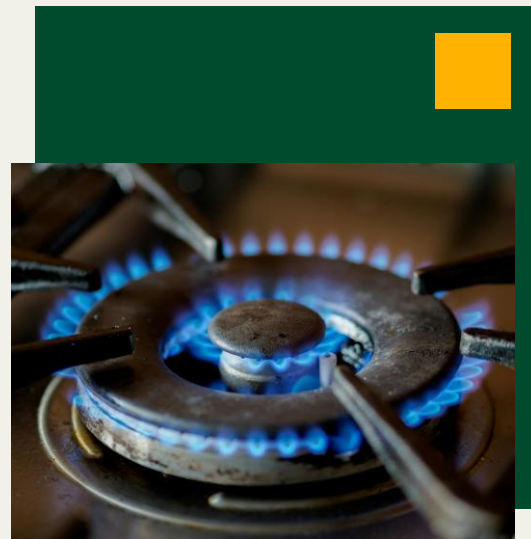




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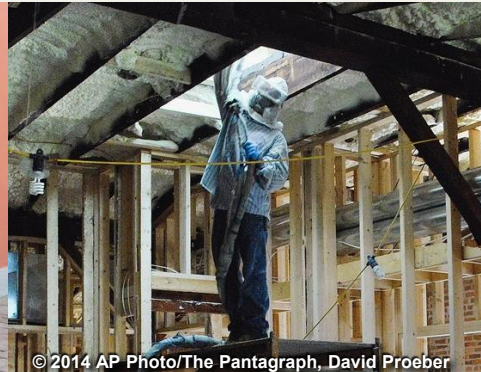
**We have the technologies in hand today
to reduce emissions 50% in this decade.**



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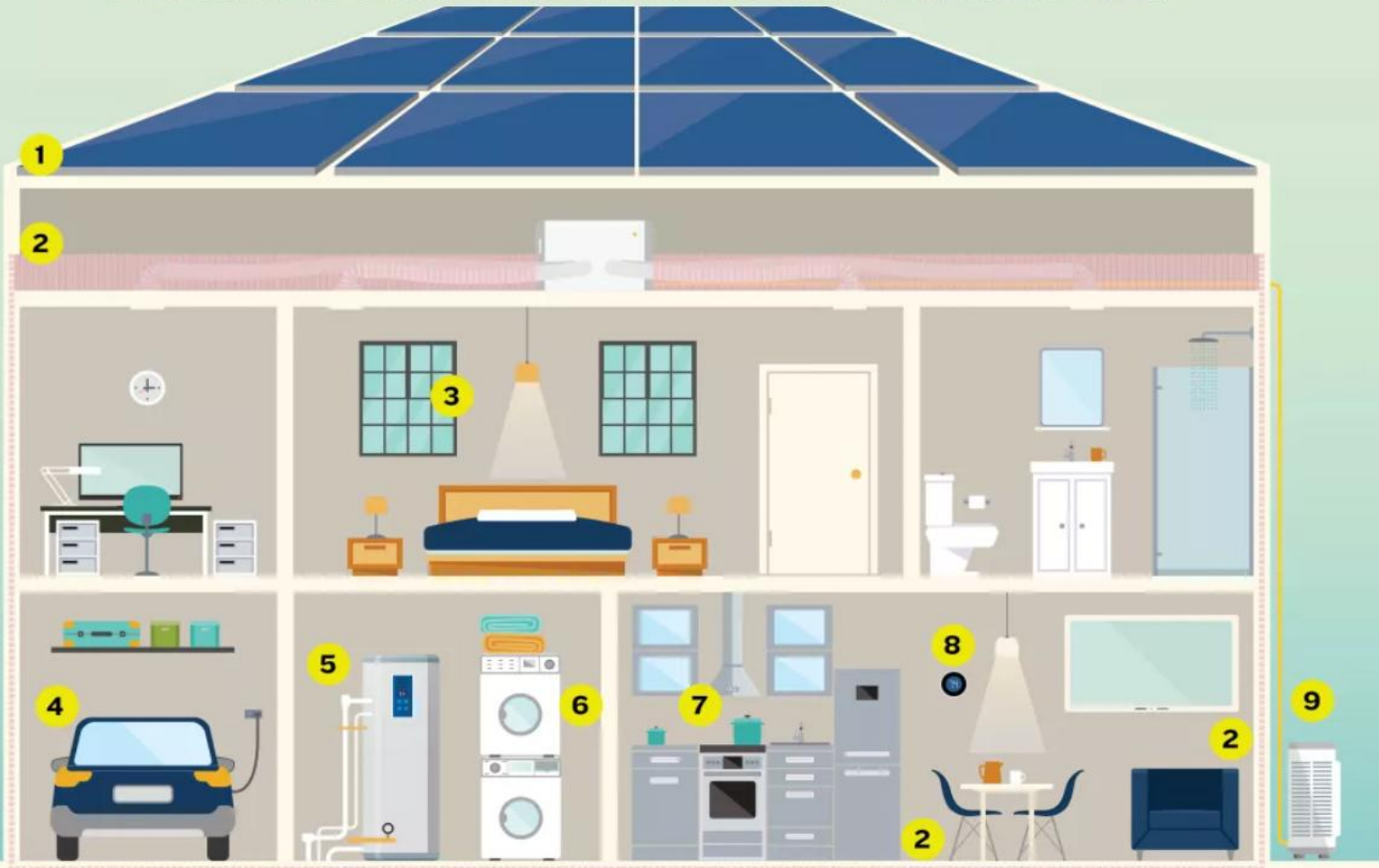


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ZEROING OUT HOME CARBON EMISSIONS

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



Federal IRA Tax Incentives Are Going Away

- | | |
|---|-----------------|
| • For EVs (\$7500 new EV, \$4000 used EV) | Expired 9/30/25 |
| • Rooftop Solar (30% of cost, no cap) | 12/31/25 |
| • Electric Panel (30% up to \$600) | 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.

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 st 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.**

COMMUNITY SOLAR



Clean Energy

Lower Energy
Costs

No Panels on
Your Property

BPU/Sustainable Jersey Community Solar

www.sustainablejersey.com/communitysolar

OUR EV – PRIUS PRIME PLUG-IN



WHAT WE DID

**We leased a new EV in Sept 2025 to get Federal + NJ incentives.
Charge-up NJ incentive of \$1500 still available**



**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

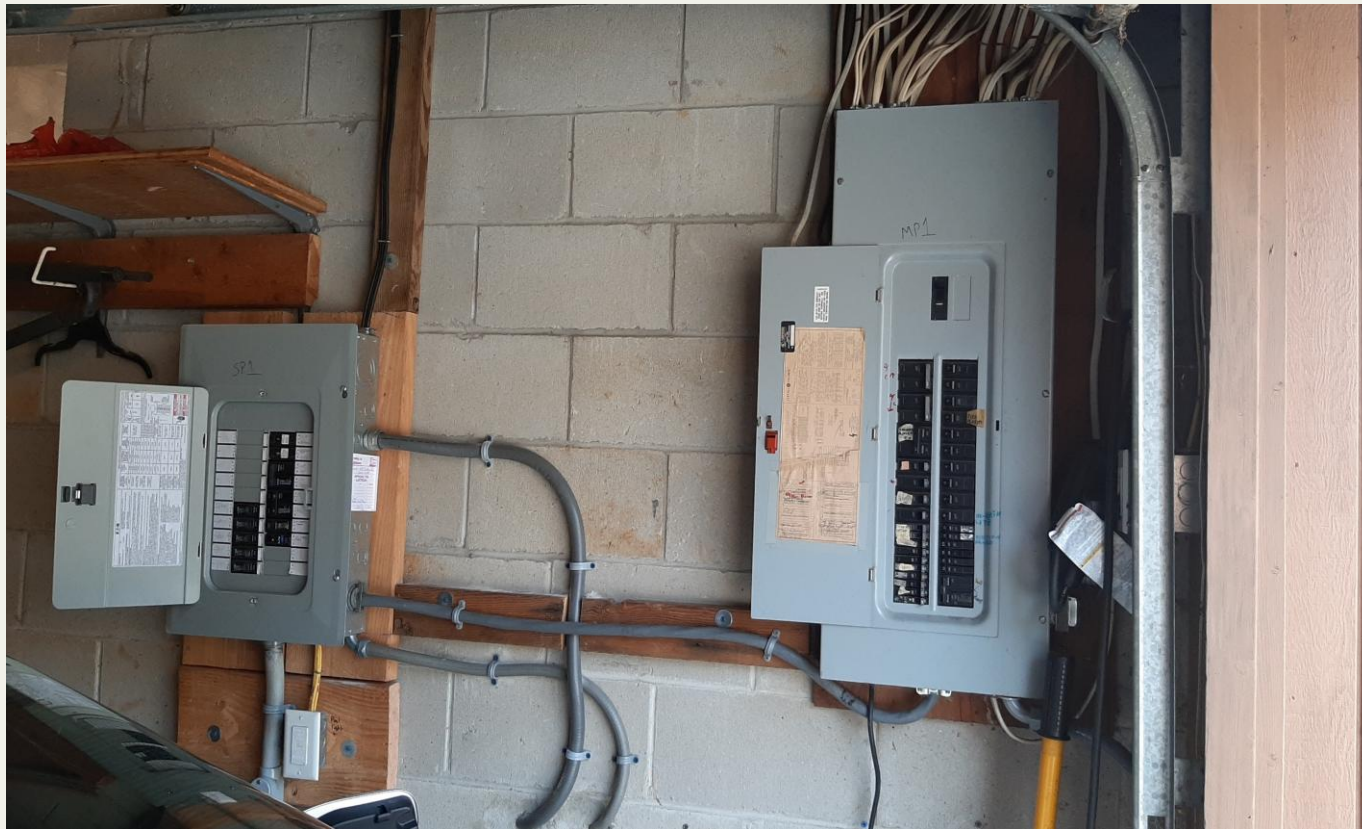
South Brunswick, NJ	May 11, 2023
Install 50 Gallon Heat Pump Water Heater w. UEF of 3.88	\$5,460
Shell Test & Seal Incl. Applicable Air Seal Top-Plates & Penetrations	\$2,960
Attic Hatch Insulated to R-13	\$275
Attic Stair Cover Insulated to R-13	\$475
4" of Dense-Packed Cellulose in Exterior Walls R-13, 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
Rebate to Ciel Power, LLC	\$5,000
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**

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

SPACE HEATING & COOLING WITH ELECTRIC HEAT PUMP

Gas Furnace Backup on Right



Shop for a New Cold Climate Heat Pump (or HPWH) Building Decarbonization Clean Heat Project

Ducted System:

One Mitsubishi hyper heat pump model SUZ-AK24NLHZ and one ducted air handler model SVZ-AP24NL. Together producing up to 23,000 BTUs of heating at 5 degrees ambient and 8.6 HSPF2/ 1.8 COP5, and cooling at 18.6 SEER2/11.7 EER2. Rated Energy Star V6.1 Cold Climate.

Included: ceiling air handlers hung from rafters w. drain pan, reducing in attic, Mitsubishi MHK2 thermostat, outdoor AC unit on pad, freon reclamation, new copper refrigeration tubing, decommissioning of gas furnace, and disposal of existing equipment.

Total Price: \$26,113 Less PSEG instant rebate of \$14,000: \$12,113.00

PSEG rebate: \$10,000 for ccASHP, \$2000 for reducing, \$2000 for decommissioning. (Could have been \$2000 more if moderate income.)

Qualifies for \$2000 Federal Tax Credit providing you owe that much or more on your 2025 taxes.

One 30-amp 220V circuit will be needed. Qualifies for up to \$600 Federal Tax Credit if panel work needed.

Qualifies for PSEG's 0% 84-month loan for full amount (with credit approval), payment \$144.20/month.

ELECTRIC HEAT PUMP WATER HEATER



HEAT PUMP COMBO WASHER/DRYER



Electric Heat Costs Less, Pollutes Less

2024 ENERGY COST FOR MILLER HOME

	ACTUAL 2024 with heat pumps for space & water heating	ACTUAL 2021 with gas for space & water heating	% CHANGE with heat pumps	With Heat Pumps
TOTAL Gas + Electric*	\$2265	\$2583	(12%)	Savings
GAS Cost	\$62	\$1088	(94%)	Reduction
ELECTRIC Cost	\$2203	\$1495	47%	Increase
THERMS Gas Burned	31	880	(96%)	Savings
TONS CO ₂ Emitted	0.2	5.1	(96%)	Savings

*Electricity in 2024 is 100% clean AND 16% lower cost, supplied by nearby Community Solar
Miller residence, single family house, Middletown, NJ v5 1/25/2025

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

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

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>

