PECO Energy Assessments

Here's what's included:



Professional advice from a PECO energy advisor. They'll help you find areas of your home that are wasting energy and ways to stay comfortable year round.



Free energy-saving products, such as LED bulbs and smart power strips (up to \$125 value).^{*} These will be installed during your in-home assessment.



A **personalized report** with energy-saving tips and strategies that can save you up to 20% on energy costs annually.

PECO exclusive rebates on HVAC equipment and weatherization work. Make qualifying heating and cooling equipment and/or weatherization upgrades through participating contractors and receive exclusive rebates from PECO. Up to \$435 in rebates for homes with central AC and non-electric heating.^{**}

Federal tax credits are available for certain energy efficiency upgrades through the Inflation Reduction Act. Find out more information <u>here</u>.



PECO Sponsored

Mr Like Page

Do you have concerns about your home, such as drafty rooms or sudden spikes in your energy bill? A PECO Energy Assessment can:

Give you access to exclusive rebates of up to \$435 for HVAC improvements, insulation and more.
 Pinpoint areas of your home that are wasting energy.

Provide a personalized plan for saving up to 20% on annual energy costs.

Schedule your PECO Energy Assessment today.



A personalized plan for **saving energy**

PECO rebates up to \$435

Comment

w Like

Expert energy-saving advice.
WWW.PECO.COM/ASSESSMENT
Learn More
10 Comments 250 Shares

Share

PECO Energy Assessments

Concerns Noted

PRIMARY CONCERNS

Opportunity to make home performance upgrades

SECONDARY CONCERNS

No concerns were given at this time.

BEST NEXT STEP

Home Air Sealing is recommended.

Whole Home Air Sealing is recommended. Block and seal uncomfortable and costly drafts beginning at the top (attic) and bottom (basement) of the home where pressure differentials are often the greatest. Continue with gaps and openings at walls, windows, doors, and overhangs. Your contractor will have tools such as a blower-door to guide them to the largest and most significant openings first.

| Recommendation | Rebate Amount | Typical Incentive |
|----------------------|------------------------|------------------------|
| Home Air Sealing | Up to \$75 per home | \$75 |
| Duct Sealing | Up to \$150 per system | \$150 |
| Rim Joist Insulation | \$0.10 per sq. ft. | \$8 for 80 linear feet |
| Rim Joist Insulation | \$0.10 per sq. ft. | \$8 for 80 linear feet |

Top ways eveyone can lower their energy costs

| 0 | |
|-----|------------|
| | = |
| | - |
| 71 | (- |
| U U |) |

Adjust Your Thermostat - Set your thermostat to 78 degrees in summer and 68 degrees in winter. At night or when you are away for long periods, turn your thermostat down to 55 degrees in wir degrees in summer.

Ś

Take Shorter Showers - Less time in the shower means less energy is used to heat the water.

Wash Laundry with Cold Water - Use cold water to wash your laundry to save energy. Even detergent manufacturers are recommending this tip to save money and keep your clothes looking thei

Health & Safety

Make safety a priority. You can help diminish dangers by being aware of problems that might occur and knowing how to respond to them if they do. The conditions indicated in the Technical Findings below were observed during a limited inspection process. No guarantees are made or implied that all such conditions have been found.

RECOMMENDATIONS

It's always a good idea to control or remove sources of indoor pollution. In conjunction with a well-sealed home, consider a whole-house ventilation system designed to maintain good indoor air quality for your specific home. Get an introduction to Indoor Air Quality (IAQ) at https://www.epa.gov/indoor-air-quality-iaq/introduction-indoor-air-quality

| Technical Findings - Health and Safety Issues Found | | | | | |
|---|----------------|--------------------|----------------|--|--|
| Gas Leak | No issue found | Vermiculite | No issue found | | |
| Combustion Safety | No issue found | Knob & Tube Wiring | No issue found | | |
| Non-IC-Rated Fixture | No issue found | Moisture Issue | No issue found | | |
| Suspected Asbestos | No issue found | Structural Issue | No issue found | | |

Congratulations!

Congratulations on taking an important step toward making your home more energy efficient with a PECO Energy Assessment! By improving the performance of your home, you will

- Enjoy a more comfortable home
- Save money for years to come
- · Help make our environment cleaner now and for future generations
- · Improve your home's market value

Your energy assessment included a comprehensive evaluation of your home, its physical structure, heating and/or cooling systems, appliances, and more. This report summarizes those findings and presents one or more combinations of recommendations to help you improve your home's efficiency and overall performance.

If you plan to proceed with any recommendations listed above, work with one of the Participating Contractors as provided by your energy advisor.

Participating Contractors are experienced installers who bring a wealth of knowledge about home performance improvements, follow specific standards, and handle all the required paperwork.

PECO Free Energy Check Up



What's Included:

- A visit with a PECO Energy Advisor who will show you ways to save energy and money in your home.
- Free energy-saving items (such as LED light bulbs, an air purifier and a smart power strip) based on your home's specific needs. Additional items may be available for homes that use electric for water heating. In-home appointments will receive free installation. Virtual appointments will receive products by mail after completion of appointment to self-install.
- A customized report with additional recommendations to improve your home's energy efficiency.

Do you qualify?

To qualify to participate in the Free Energy Checkup Program, customers must meet several requirements. Eligibility requirements include PECO residential electric customers who personally receive an electric bill, have permission to make energy-saving upgrades at their residence, have not had a Free Energy Checkup in the past two years and monthly household income is at or below the amounts listed in the chart.

Qualifying Monthly Income

| Number of People in Your Home | Maximum Monthly Household Income |
|-------------------------------|----------------------------------|
| 1 | \$1,883 |
| 2 | \$2,555 |
| 3 | \$3,228 |
| 4 | \$3,900 |



Do you heat your home with electricity?

Customers who heat their home with electricity may be eligible for greater savings and free major upgrades with an in-depth Free Energy Checkup+.

Homes that receive a Free Energy Checkup+ may be eligible for upgrades like service or replacement of heating and cooling equipment, new insulation, duct sealing and more.

Learn more and take advantage of this free program!



Free Energy Checkup +



Pilot Objectives and Approach

The Health and Safety Pilot (HSP) was designed to address health and safety (HS) barriers in income-eligible (IE) homes that prevented the installation of energy efficiency (EE) measures.

Goal

The Customer Service Provider (CSP), CMC, provided HS treatments to IE PECO customers to facilitate follow-up bridged EE measures that would not otherwise be possible.

Time Period

The pilot occurred over the course of 17 months, from June 2022 to November 2023.

Budget

The total HSP budget was at least \$400,000 and not to exceed \$500,000.

Success Criteria

The pilot goal was to address approximately 200 health and safety treatments for 165 customers to increase qualifying bridged EE measures and energy and demand savings.

Tracking System Review Findings

Addressing HSP Comfort and Safety issues resulted in the ability to install the greatest energy savings measures.

HS Treatments: Energy Savings Breakdown

| Treatment Group(s) | # of Customers | Total Reported kWh | Total Reported kW | Total Reported kWh (w/ VR) ¹ | Total Reported kW (w/ VR) ² |
|---|----------------|--------------------|-------------------|--|---|
| HSP Comfort and Safety | 33 | 437,418 | 15.30 | 440,042 | 15.38 |
| HSP Moisture | 9 | 157,760 | 5.60 | 158,707 | 5.63 |
| HSP Electrical | 11 | 154,931 | 5.32 | 155,860 | 5.35 |
| HSP Indoor Air Quality | 7 | 113,166 | 4.00 | 113,845 | 4.02 |
| HSP Indoor Air Quality, HSP Moisture | 3 | 54,783 | 1.64 | 55,112 | 1.65 |
| HSP Electrical, HSP Indoor Air Quality | 2 | 36,272 | 1.85 | 36,490 | 1.86 |
| HSP Comfort and Safety, HSP Moisture | 4 | 30,616 | 1.38 | 30,800 | 1.39 |
| HSP Comfort and Safety, HSP Electrical, HSP Moisture | 2 | 28,020 | 1.14 | 28,188 | 1.14 |
| HSP Comfort and Safety, HSP Electrical | 1 | 8,829 | 0.27 | 8,882 | 0.27 |
| HSP Electrical, HSP Moisture | 1 | 1,039 | 0.00 | 1046 | 0.00 |
| Grand Total | 73 | 1,022,834 | 36.504 | 1,028,971 | 36.69 |

¹ kWh Verification Ratio (VR) from SFIE = 1.006

² kW Verification Ratio (VR) from SFIE = 1.005

³ This accounts for 3% of SFIE savings from PY14-PY15 Q2.

Tracking System Review Findings

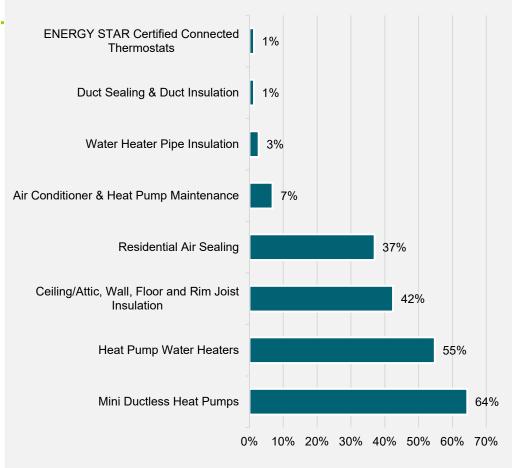
The HSP treatments resulted in the installation of two bridged EE measures on average.

Key Findings

- There were **8** different types of bridge measures installed as a part of this pilot.
- Participant households had 2.2 bridge measures installed on average compared with SFIE¹ households receiving 2.1 unique measures installed on average.
- The maximum number of bridge measures installed in a single household was
 4.
- 29% of customers had 3+ bridge measures installed.
- Ductless Mini-Split Heat Pumps (64%) were the most common bridge measure, followed by Heat Pump Water Heaters (55%) and Ceiling/Attic, Wall, Floor, and Rim Joist Insulation (42%), which aligns with the PY14 standard evaluation.
- The most common bridge measure combination was Heat Pump Water Heaters and Ductless Mini-Split Heat Pumps (41%), followed by Ceiling/Attic, Wall, Floor, and Rim Joist Insulation and Residential Air Sealing (36%).

¹ Participation in SFIE limited to measure types installed as part of pilot program (Ductless Mini-Split, Air Sealing, etc.)

Bridge Measures Installed





Make your home **more** energy efficient.





Cut energy costs Increase comfort Determine proper weatherization upgrades

To schedule your PECO Energy Assessment:

Call 888-5-PECO-SAVE (888-573-2672)

Visit peco.com/assessment or scan QR code →



PECO Energy Assessment Market Price: \$199 Customer Price: \$49

Limited supply per household and where applicable. Certain restrictions apply. You must be a PECO electric customer to participate. One Energy Assessment per residence, per year.

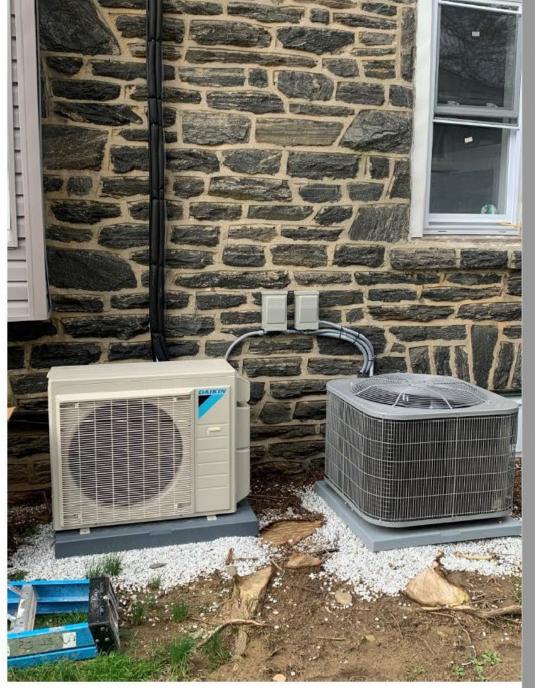
If you have questions or your eligibility requirements about the program, contact our Customer Care team at 888-5-PECO-SAVE (888-573-2672). Representatives are available Monday through Friday between 7 a.m. to 7 p.m.

Heat pumps 101- an introduction May 30, 2024

Steve Clark Sam Krakow



Haverford Township Parks & Recreation Dept.



Haverford Township Environmental Advisory Committee CO₂ Impact Cost, complexity

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Electrify Your Home 101- It 's more than solar and EVs!

- <u>Solar PV</u>: provide your own carbon-free energy and take a step toward independence
- Electric vehicles: no pollution, faster acceleration, very quiet, lower fuel cost
- Heat pump HVAC: no gas fumes or carbon monoxide risk, provides both heating and cooling, easy to retrofit, can now <u>efficiently heat in very cold climates</u>.
 - Heat pump water heater: no gas pollution, modern easy control system
 - <u>Heat pump or electric clothes dryer</u>: no gas pollution, easier on clothes
 - <u>Induction stove top</u>: no gas pollution, quicker cooking with better control; stove top does not get too hot; no fire or burn risk
 - <u>Electric vard equipment</u>: no pollution, less noise, no need to store flammables in or near your home

For more information on IRA credits see Clean Energy for All - The White House

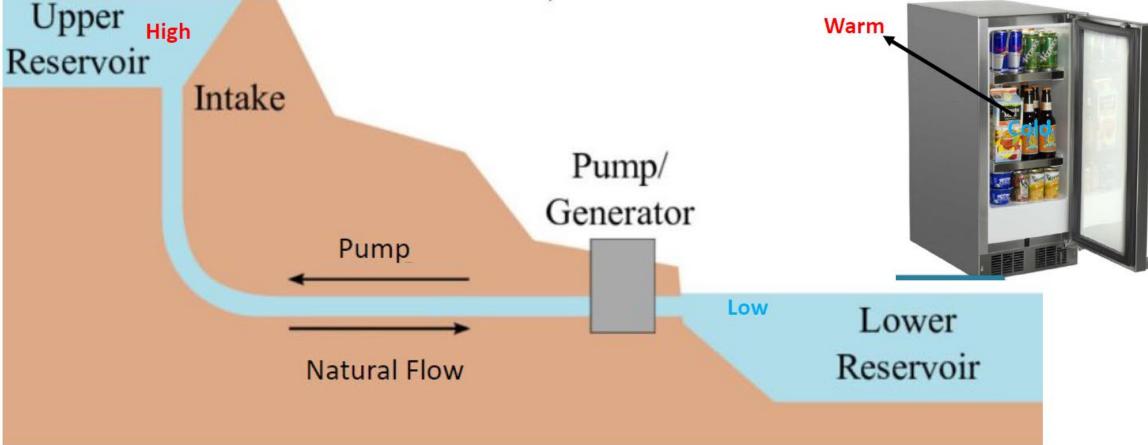
What is a Heat Pump?

Just like water moves from a water pump can reverse natural direction

Heat spontaneously moves from a heat pump can reverse natural direction High \rightarrow Low, $Low \rightarrow High$

Warm \rightarrow Cold, **Cold** \rightarrow Warm





Heat Pumps can efficiently heat you home when it is very cold outside!

Northeast Energy Efficiency Partnership (neep.org) Heat pump power and efficiency down to 5F, and even starting listings -15F Must have at least 175% efficiency at 5F ~ 120,000 models listed IRA Tax credit eligible filters being added.

https://ashp.neep.org/#!/product_list/ С \leftarrow ŵ A» G 5≡ (NEEP'S COLD CLIMATE AIR SOURCE Heat Pump List Search Products Consumer and Installer Resources About ASHP Initiative About NEEP Product Type 🕕 Heating Capacity Heating Capacity 5°F AHRI, Model, Unit 🕕 Ducting Brand Configuration 47°F Rated Btu/h 🕕 Max Btu/h 🚯 80000 80000 0 0 All Product Typ 💙 AHRI, Model or Ur All Ducting Con Y All Brands Eligible for Federal Tax Credit 🕕 **ENERGY STAR Certified** ENERGY STAR All Regions ENERGY STAR Cold Climate North Southeast Southwest Advanced Search - Sizing for Heating 7 8 9 10 > (40994 Heat Pumps) List View Download Product List 6 Grid View **ccASHP ccASHP ccASHP**

| $\leftrightarrow \rightarrow C$ \Diamond https://ashp.neep.org/#!/product/34385/7/25000///0 | | | | | | | | Au e | 2 | |
|---|---|--|---------------------|-----------------|-------------|-------------|---------------|--------------------------|----------------|------------------------------|
| Heat Pump List | Search Products | Cons | umer and Insta | iller Resources | | | , | About ASHP Initi | ative | |
| | Back to List | | | | | | | ይ Savi | e PDF | |
| | River boye base hat Switch energy environment Alt Out Ind | litsubishi Electric M-Series nglezone Non-ducted Wall Placeme IRI Cert #: 204629220 utdoor Unit #: MUZ-FH12NAH door Unit #: NAXWPH12A112A* Maximum Heating Capacity (Btu/hr | ent |) | | | | Advanced Data Heating | - Sizing for | |
| | ۵ | Rated Heating Capacity (Btu/hr) @4 | 47°F: 13,600 | | | | | | | |
| | Information Tables | Rated Cooling Capacity (Btu/hr) @ | | ance Spec | c | | | | | |
| | Brand | Mitsubishi Electric | Heating / | | Indoor Dry | | | | | |
| | Series | M-Series H2i | Cooling | Dry Bulb | Bulb | Unit | Min | Rated | Max | |
| | Ducting Configuration | Singlezone Non-ducted Wall Placement | Cooling | 95°F | 80°F | Btu/h kW | 2,500 0.17 | 12.000 0.87 | 13,600 1.15 | |
| | AHRI Certificate No. | 204629220 | | | | COP | 4.31 | 4.04 | 3.47 | |
| | Outdoor Unit # | MUZ-FH12NAH | Cooling | 82°F | 80°F | Btu/h | 2,760 | - | 15,020 | |
| | EER | 13.8 | | | | kW | 0.15 | 2 | 1.04 | |
| | EER 2 | | | | | COP | 5.39 | - | 4.23 | |
| | Variable Capacity | × | Heating | 47°F | 70°F | Btu/h | 3,700 | 13,600 | 21,000 | |
| | Indoor Unit Type | Mini-Splits | | | | kW | 0.28 | 0.95 | 2.3 | Temp, efficiency. Heat power |
| | Indoor Unit # | NAXWPH12A112A* | | | | COP | 3.87 | 4.2 | 2.68 | 47°F, 268-387% , 21.0 MBH |
| | Furnace Unit # | | Heating | 17°F | 70°F | Btu/h | 2.100 | 8.100 | 13.600 | |
| | SEER | 26.1 | | | | kW | 0.33 | 0.84 | 1.96 | |
| | SEER 2 | | | | | COP | 1.86 | 2.83 | 2.03 | 17°F, 186-203% , 13.6 MBH |
| | HSPF (Region IV) | 11.5 | Heating | 5°F | 70°F | Btu/h | 1,450 | - | 13,600 | |
| | HSPF 2 (Region IV) | | | | | kW | 0.28 | | 1.93 | |
| | Energy Star | × | | | | COP | 1.52 | - | 2.07 | 5°F, 152-207%, 13.6 MBH |
| | Energy Star Cold Climate | | | | Heating (Ca | olina C | macity | Craph | | |
| | Turndown Ratio (Max | 3.68 | | | Heating/Co | uning Ci | apacity | Graph | | |

 $\leftarrow \rightarrow$

Air source heat pumps extract heating or cooling from outdoor air. Technology designed for cold climates can efficiently heat homes all winter across New York State.

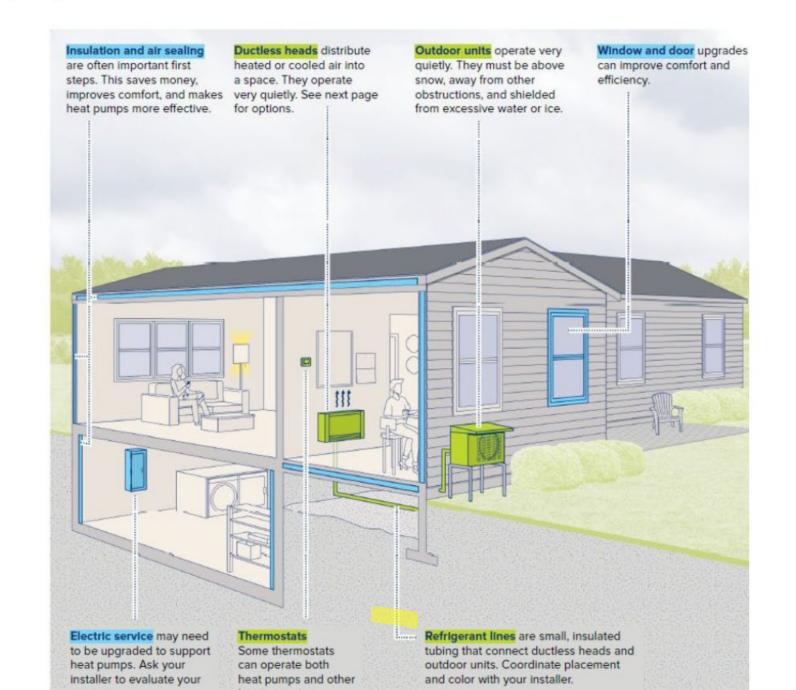
Air source systems are less costly to install and more versatile, but not as efficient as ground source heat pumps.

Outdoor units – similar to AC condensers – are necessary with air source heat pumps.



Air source heat pump for a home with ducts

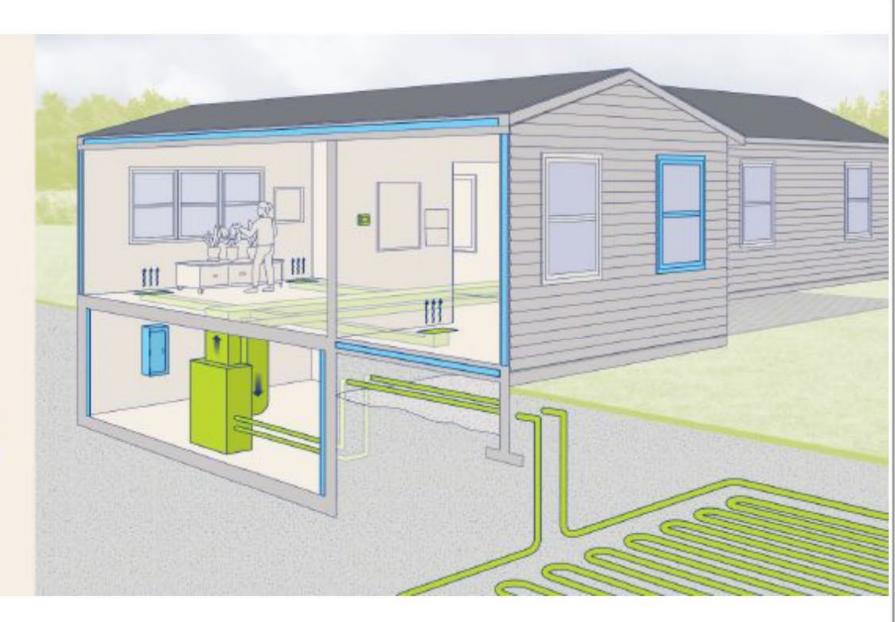
Air source heat pump for a home without ducts



Ground source or Geothermal heat pumps use buried pipes to extract heating or cooling from below ground.

Compared to air source heat pumps, ground source heat pumps are more efficient and do not require outdoor units (condensers).

Ground source systems typically take longer and cost more to install.



New technology - Window Unit Heat pumps.

Large studies with NYC HA, NYSERDA underway with Midea and Gradient window unit HPs.

Midea technical information high efficiency at cold temperatures 120V power



| Voltage | 120 VAC | 120 VAC | | | | |
|------------------------------|----------------|------------------|-------------|--|--|--|
| Phase | 60 Hz | 60 Hz | | | | |
| Minimum Circuit Ampacity | 15 A | 15 A | | | | |
| | Working | Eco | Mode | | | |
| | Condition | Capacity | Efficiency | | | |
| | Condition | (Btu/h) | Efficiency | | | |
| Cooling | 95°F (35°C) | 8965 | EER=12.6 | | | |
| Mode | 82°F (27.8°C) | 8940 | EER=19.2 | | | |
| llast | 47°F (8.3°C) | 9008 | COP=3.57 | | | |
| Heat | 17°F (-8.3°C) | 8864 | COP=2.36 | | | |
| Mode | 0°F (-17.8°C) | 6159 | COP=1.71 | | | |
| Lowest Operating Temperature | -13°F (-25°C) | -13°F (-25°C) | | | | |
| Unit Dimensions | 25.5"x35.0"-41 | L.0"x20.5" (Indo | or/Outdoor) | | | |
| Unit Weight | 125 lbs approx | | | | | |
| Variable Speed Compressor | Yes | | | | | |
| Indoor sound level High/Mid | E2/44/20/26 | | | | | |
| /Low/Sleep Settings (dB(A)) | 52/44/39/36 | 52/44/39/36 | | | | |
| Parts Limited Warranty | 5 years | 5 years | | | | |
| Compressor Limited Warranty | 12 years | | | | | |

* Specifications are subject to change.

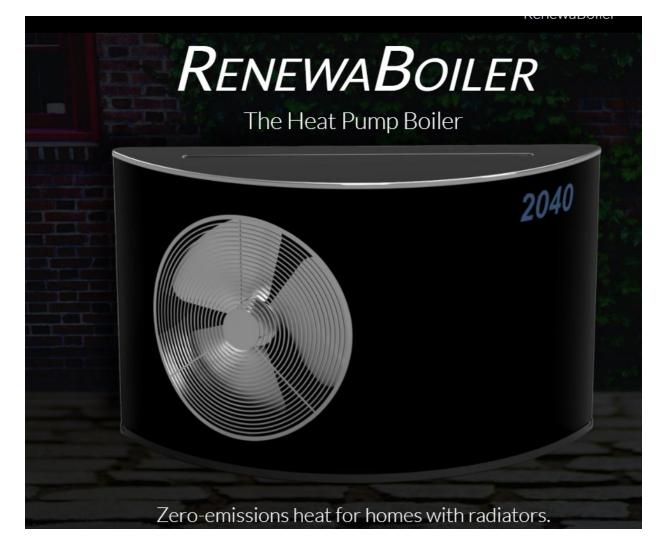
New technology – Air to Water heat pumps

For homes with Radiators and boilers

Hot water needed high output water temperatures for cast iron radiators 160-170F

Can also heat Domestic hot water.

models coming out in 2025 with high temperature output.





Chiltrix CX35 Ultra-Efficient Air-To-Water Heat Pump (2 Ton Cool, 3 Ton Heat) Replaces CX34 (CX35, Unico)

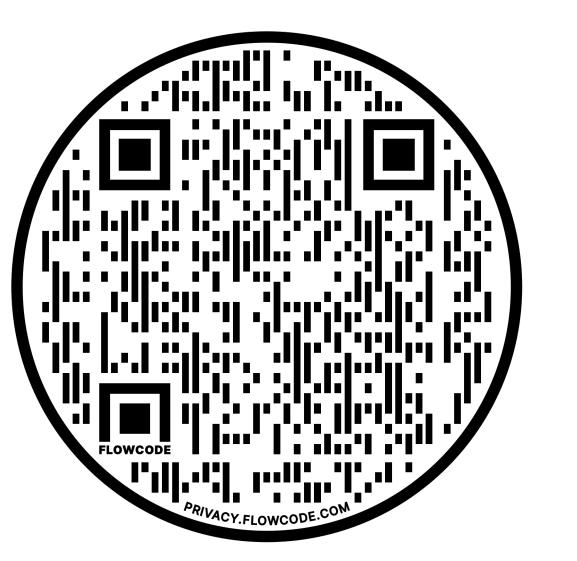
Key Considerations:

- ✓ Know the age of your HVAC system, replace near end of useful life = 15-20 years. Plan <u>before</u> emergency hits
- ✓ Good savings for replacing oil and propane HVAC with heat pumps. Break even replacing gas.
- ✓ Furnace replacements the simplest. If you have radiators, ductless mini splits or air-towater heat pumps (more complex).
- ✓ Make sure you your home is well insulated & air sealed first. www.peco.com/assessment
- ✓ Always insist on cold climate variable speed heat pumps, listed on NEEP.org. Units rated down to 5°F and below.
- ✓ Backup fossil heat is not needed even in the coldest weather. Heat pump must be properly sized.

✓ Maximize IRA incentives

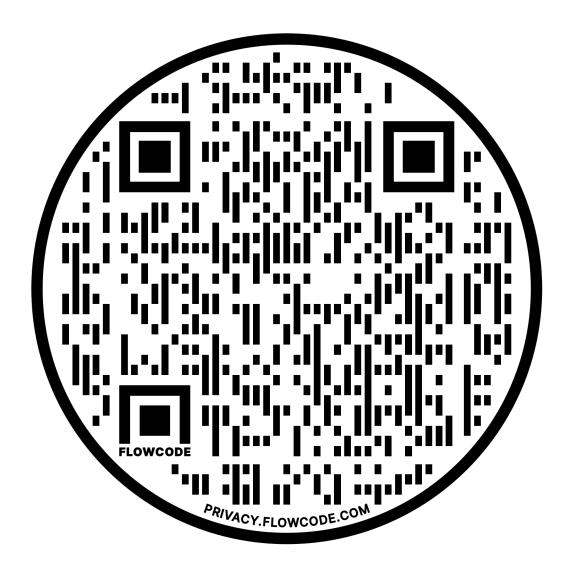
Choose a heat pump eligible for \$2000 Federal tax credit PA DEP incentives available starting 2025.....stay tuned FREE guidance from Friends of Haverford EAC on fossil fuel \rightarrow heat pumps transition.

Email havswitch@gmail.com



Haverford EAC channel: More info on heat pumps, Home electrification, Solarize Delco, composting, waste reduction

https://www.youtube.com/@haverfordeac



Inflation Reduction Act Tax Credits and Rebates for Home Energy Improvements and Electrification Scott Sidlow **Energy Auditor and Energy Rater** Solstice Home Performance

Solstice Home Performance

- General Contracting company that focuses on how the home performs instead of how it looks.
- Usually start with an Energy Audit, Home Performance Inspections, or Energy Rating
- Help homeowners develop and implement a 10 day to 10 year plan to reduce energy consumption and/or electrify their home.
- Use a building-science based approach to whole home performance.
- Serve Delaware County and the surrounding areas.



Scott Sidlow

- 18 Year career as a Home Performance Analyst with multiple Home Performance Contracting and Home Energy Rating Companies
- BPI Certified Building Analyst
- Resnet Certified HERS Rater
- Inaugural member of the Delaware County Sustainability Commission (served 3 year term)
 - Served on Energy and Efficiencies subcommittee for Sustainability Plan
- Parkside Borough Council Member 2020-2024





Inflation Reduction Act

- Passed Aug 16, 2022
- Huge Omnibus bill that provides a lot of programs, tax credits and incentives many of which are intended to reduce America's carbon footprint.
 - Green New Deal
 - Home Energy
 - Commercial Buildings
 - New Homes
 - Advanced Energy Projects
 - Advanced Manufacturing
 - Electric Vehicles (new and used)
 - Aviation Fuel
 - Clean Hydrogen



- Renewable Energy Production
- Zero Emission Nuclear
- Low-Income Community Bonus,
- CO sequestration,
- IRS Modernization
- Health Care Provisions



IRA Home Energy Incentives

Energy Efficient Home Improvement Tax Credit

Residential Clean Energy Tax Credit

- Energy Efficient Home Improvement Rebates (Coming Soon)
 - ► HER Program

HEAR Program



Energy Efficient Home Improvement Tax Credits

- Bucket #1: Up to \$1200 can be taken every year
 - Home Energy Audit- 30% tax credit up to \$150
 - Insulation and Air Sealing Materials-30% up to \$1200
 - Energy Star Exterior Doors-\$250 tax credit / door up to \$500 total
 - Energy Star Windows- \$600 total tax credit
 - High Efficiency equipment \$600 tax credit
 - Central AC, Water Heaters, Furnaces, Boilers
 - Electrical Improvements to support energy equipment -\$600 tax credit
- Bucket #2: 30% tax credit up to \$2000 can be taken every year.
 - Heat Pumps
 - Heat Pump Water Heaters
 - Bio-Mass Stoves



| Nametis) shown on return | | Your | social security number |
|--|--|------|--------------------------------------|
| Department of the Treasury Internal Revenue Service | Attach to Form 1040, 1040-SR, or 1040-NR. Go to www.irs.gov/Form5605 for instructions and the latest information. | | 2023 Atachment Sequence No. 75 |
| Form 5695 | Residential Energy Credits | | 0VE No. 1545-0074 |

Residential Clean Energy Credit (See instructions before completing this part.

Note: Skip lines 1 through 11 if you only have a credit carryforward from 2022.

Enter the complete address of the home where you installed the property and/or technology associated with lines 1 through 4 and 5b. For more than one home, see instructions.

| Nurthe | r and atreet | Unit no. | City or town | Statle | ZP code |
|--------|---|----------------|-----------------------------------|--------|---------|
| 1 | Qualified solar electric property costs | 88369 | | 1 | |
| 2 | Qualified solar water heating property costs | | | 2 | |
| 3 | Qualified small wind energy property costs | | | 3 | |
| 4 | Qualified geothermal heat pump property costs | aa oo | | 4 | |
| 5a | Qualified battery storage technology. Does the qualified at least 3 kilowatt hours? (See instructions.) If you che for qualified battery storage technology . | cked the "N | o" box, you cannot claim a credit | 5a | Yes No |
| b | If you checked the "Yes" box, enter the qualified battery | | | 5b | |
| 6a | Add lines 1 through 5b | | an the states | 6a | |
| b | Muttply line 6a by 30% (0.30) | (464.00) | 1.1.1.1.1.1.1.1.1.1 | 6b | |
| 7a | Qualified tuel cell property. Was qualified tuel cell prop | perty installe | d on, or in connection with, your | | |

Residential Clean Energy Tax Credit

- 30% tax credit with no annual maximum or lifetime limit available until 2032
 - Solar Panels
 - Small Wind
 - Solar Water Heaters
 - Geothermal Heat Pumps
 - Fuel Cells
 - Battery Storage
- Example: \$15,000 Solar System = \$4500 tax credit



Sample Home Improvement Timeline and Tax Credits

- Energy Audit \$550 \$150 tax credit
- Attic and basement Air Sealing and Insulation (7500 total) materials \$3750 - \$1125 tax credit
- ▶ Heat Pump Water Heater \$3450 \$1035 tax credit

Year 1 Investment\$11,450 - tax credit \$2235

> 2025

- Electrical upgrades \$1750 \$525 tax credit
- Windows or Door Replacement \$2000 \$600 tax credit
- Heat Pump Installation \$12,000 \$2000 tax Credit

Year 2 Investment \$15,750 - Tax Credit \$3125

> 2026

Solar Array - 4 KW system - Year 3 Investment \$15,000 - Tax Credit \$4500
 Total Investment \$42,200 - Total Tax Credit \$9860= 23%
 SOLSTICE
 HOME PERFORMANCE
 Delco's Home Energy Expert

IRA Home Energy Rebate Programs

- Coming Soon
- HER Program-Performance Based Home Energy Reduction Program -the more you save, the greater the rebate
 - 4.3 Billion over 10 years
 - ▶ 129.98 million to PA over 10 years
- HEAR Program-High Efficiency Electric Home Rebate Program
 - 4.5 Billion over 10 years
 - 129.2 million to PA over 10 years
- Rebates are based on your income vs Area Median Income
 - Delco 80% AMI for family of four is \$84,300



Rebate Programs are Federally Funded and Administered by the States

- 8/22 IRA Law passed
- Department of Energy designed the program and sent guidelines to states
- State Energy Offices develop their programs
 - Hire Staff
 - Hire Program Management companies to implement
- States must send proposed plans to DOE for approval
- DOE reviews and approves or requests redesign
- States begin rolling out the program through contractors



HER Program-Home Energy Rebate

- PA DEP
- Modeled Program
 - Energy Model of the home and improvements is completed to predict savings
- PA Multi Family Program
 - Administered PA Housing Finance Agency
 - Predict 20% to 34% reduction
 - \$2000 rebate (Above 80% AMI) or \$4000 rebate (below 80% AMI) up to 80% of project cost
 - ▶ 35% or greater
 - \$4000 rebate (Above 80% AMI) or \$8000 rebate (below 80% AMI) up to 80% of project cost



HEAR Program Home Electrification Appliance Rebate

- Provides Rebates for Electrifying Equipment and Appliances
- Administered by PA DEP Energy Programs Office
- No Details have been announced

| Appliance/Equipment | Rebate below 80% AMI | Rebate 80-150% AMI |
|-----------------------------------|----------------------|--------------------|
| Heat Pump | \$8000 | \$4000 |
| Electric/Induction Stove | \$ 840 | \$ 420 |
| Heat Pump Water Heater | \$1750 | \$875 |
| Electric Wiring | \$2500 | \$1250 |
| Electric Panel | \$4000 | \$2000 |
| Insulation, Air Sealing, Ventilat | ion \$1600 | \$ 800 |
| Max Rebate | \$14,000 | \$14,000 |



Pennsylvania Incentives

KEEP Loan

- Recently Announced
- \$2,500 to \$25,000

SOLSTICE

KEEP HOME ENERGY LOAN

KEYSTONE ENERGY EFFICIENCY PROGRAM Supported by PEDA • Powered by *****NEIF

Special Energy Efficiency Financing for Pennsylvania Homeowners

Pennsylvanians can Go Greener, Affordably with fixed monthly payment financing for **improvements that make your home more energy efficient**. The KEEP Loan is supported by the Energy Development Authority (PEDA)'s Pennsylvania Energy Accelerator Program, and lending is administered by the National Energy Improvement Fund (NEIF), a Pennsylvania-based B Corporation.

- HEATING, COOLING, WATER HEATING
- BUILDING PRODUCTS, WINDOWS, DOORS
- 100% FINANCING OF PROJECT
- MAXIMUM PROJECT SIZE IS \$25,000.
- SIMPLE, LOW-INTEREST PAYMENTS
- HOME PERFORMAN WORK MUST BE PERFORMED BY NEIF-APPROVED CONTRACTOR Delco's Home Energy Expert



Low Monthly Payment Examples*

| | 36 Months | 60 Months | 120 Months |
|----------|-----------|-----------|------------|
| \$2,500 | \$79 | \$52 | \$32 |
| \$5,000 | \$159 | \$104 | \$63 |
| \$7,500 | \$238 | \$156 | \$95 |
| \$10,000 | \$318 | \$208 | \$127 |
| \$12,500 | \$397 | \$259 | \$158 |
| \$15,000 | \$477 | \$311 | \$190 |
| \$17,500 | \$556 | \$363 | \$222 |
| \$20,000 | \$636 | \$415 | \$253 |
| \$25,000 | \$795 | \$519 | \$317 |

*All loans are made directly to the consumer by National Energy improvement Fund, LLC. Payment estimates based on 8.99% APR. Rates subject to change.

Incentive Stacking

Market-Rate Households

No Income Qualification / above 150% Area Median Income

EERLF Low-Interest Ioan 25C Tax Credit Heat Pump or Heat Pump Water Heater + Insulation \$3,200 / year

HOMES (20% or 35% Modeled energy savings / 15% Measured energy savings) \$2,000 or \$4,000 / \$2,000 payment rate per kWh saved²⁴ Up to 50% of project cost

Utility Rebate (as applicable)

Moderate-Income Households

Between 80% - 150 % Area Median Income



Up to 50% of project cost Utility Rebate (as applicable)



Images from:



Where to Begin?

- Don't Wait for additional money to be available
 - Tax Credits are available now
- Conduct an Energy Audit and develop your plan for Electrifying and Improving your home
 - How to Improve the Building Shell by Air Sealing and Insulating as much as practical and possible
 - Assess HVAC, Water Heater and Roof ages to determine timeline for replacement and to maximize incentives and plan electrification
- Solve Moisture or Knob and tube wiring issues that are not eligible for tax credits and rebates
- Rebates are Coming Soon



Rough Order of Home Performance Improvements

- Combustion Safety
- Electrical Safety
- Dry (ventilation, basement, roof, etc.)
- Fresh Air / Proper Ventilation / Good Indoor Air Quality
- Air Sealed and Insulated Building Shell
- Efficient (& Electric) Heating and Cooling part of replacement cycle
- Efficient (& Electric) Water Heating-part of replacement cycle
- New Windows based on operability and comfort
- New Roof
- Solar planned in conjunction with roof replacement cycle.

