

INFLATION REDUCTION ACT HOME ENERGY REBATES: PROGRAM GUIDANCE FOR STATE ENERGY OFFICES

FEATURED CASE STUDIES AND RESOURCES

Sara Baldwin and Maddie Kane, Energy Innovation
Tyler Poulson, Collaborative Climate

OCTOBER 2023

ENERGY
INNOVATION 
POLICY & TECHNOLOGY LLC®

Photo by Cytonn Photography on Unsplash



PROGRAM DESIGN PRINCIPLES for Effective Residential Energy Efficiency & Electrification Retrofits



1 Utilize data to inform program design and implementation strategies



2 Set clear program objectives and key results; adopt metrics to track progress



3 Adopt strategic marketing and outreach strategies to reach target audiences



4 Provide hands-on support to consumers and contractors



5 Make it economically beneficial to adopt efficient, all-electric technologies (and insulate financially vulnerable customers from bill increases)



6 Incorporate measurable customer experience and quality assurance protocols



7 Support durable market momentum and business model evolution with workforce and industry engagement

Inflation Reduction Act Home Energy Rebates: Program Guidance for State Energy Offices

Featured Case Studies and Resources

These case studies and resources provide examples of the program design principles featured in the full report. These real-world examples can help State Energy Offices (SEOs) design and implement IRA Home Energy Rebate programs. Additional examples are within the report.




1 Utilize data to inform program design and implementation strategies

- **Greenlink Analytics** – [Equity Maps and Reports](#)
- **Inclusive Economics** – [Workforce and Employment Analyses](#)



2 Set clear program objectives and key results; adopt metrics to track progress

- **Urban Sustainability Directors Network** – [Equity and Buildings: A Practical Framework for Local Government Decision Makers](#)




3 Adopt strategic marketing and outreach strategies to reach target audiences

- **Beneficial Electrification League of Colorado** – [Love Electric](#)
- **Building Decarbonization Coalition** [The Switch Is On](#)



4 Provide hands-on support to consumers and contractors

- **BAYREN** – [Home Energy Advisor Program](#)
- **Energy Coordinating Agency** – [Neighborhood Energy Centers](#)
- **Massachusetts Heat Pump Coaches** – [Community Coaching Programs](#)



5 Make it economically beneficial to adopt efficient, all-electric technologies (and insulate financially vulnerable customers from bill increases)

- **ACEEE** – [Empowering Electrification Through Building Envelope Improvements](#)
- **Efficiency Maine** – [Heat Pump Support](#)



6 Incorporate measurable customer experience and quality assurance protocols

- **Rocky Mountain Power** – [Wattsmart Trade Ally Program](#)



7 Support durable market momentum and business model evolution with workforce and industry engagement

- **NYSERDA** – [Clean Heat Connect](#)

GREENLINK ANALYTICS - Equity Maps and Reports

Notable Features:

- **Maps localized data** on energy burdens, health impacts, housing characteristics, and other details for select communities across the U.S.
- **Quantifies equity challenges** and intersectional issues, including socioeconomic and racial disparities.
- **Illustrates geographic areas of opportunity** for targeted energy programs and other funding to improve energy affordability, comfort, and health.

IRA HOME REBATE PROGRAM RELEVANCE: Collecting and mapping holistic data helps program administrators identify interrelated demographic, income, and equity challenges and support targeted outreach and investments, especially for low-income and historically underinvested communities.

Resource Link: <https://www.equitymap.org/publications>



1

Utilize data to inform program design and implementation strategies

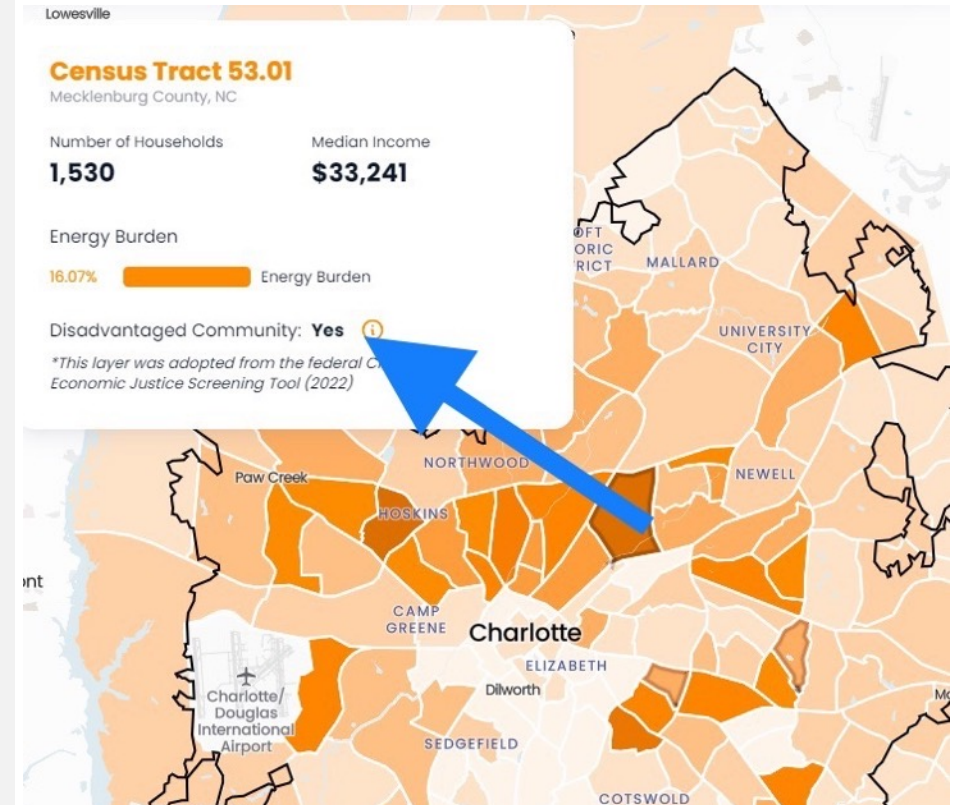


Image source/credit: Greenlink, Disadvantaged Communities Tool, <https://www.greenlinkanalytics.org/post/now-on-gem-disadvantaged-communities>

INCLUSIVE ECONOMICS - Workforce and Employment Analyses

Notable Features:

- Features **economic impact reports** reflecting current and future workforce conditions based on decarbonization trends and policies.
- Defines **climate policy** benefits related to workforce with examples on state, regional, and local levels.
- Highlights **important workforce principles**, such as family-sustaining wages and long-term career pathways, to incorporate into related program efforts.

IRA HOME REBATE PROGRAM RELEVANCE: Evaluating the current state of the residential energy retrofit workforce at the outset can help identify gaps and needs for rebate program design and implementation.

Resource Link: <https://inclusiveecon.com/research-2>



1

Utilize data to inform program design and implementation strategies

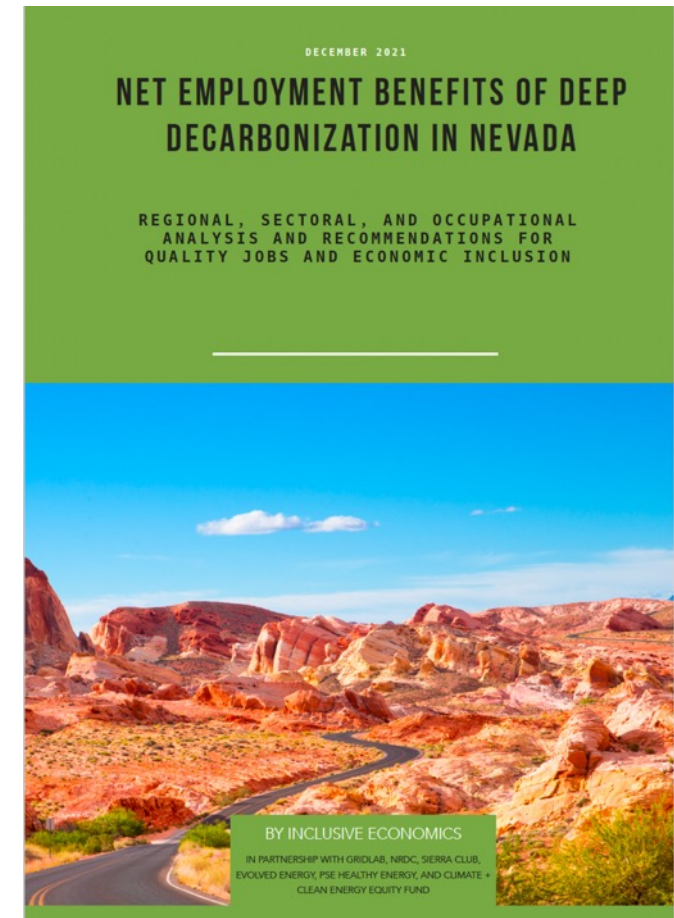


Image source/credit: Inclusive Economics, December 2021, <https://inclusiveecon.com/research-2/>

URBAN SUSTAINABILITY DIRECTORS NETWORK - Equity and Buildings: A Practical Framework for Local Government Decision Makers

Notable Features:

- Provides guidance on equity issues related to energy and housing and offers strategies to address equity through effective program and policy design.
- Supports goal development with case study examples and guiding questions to center equity issues while setting program objectives.
- Offers strategies for community engagement and government interdepartmental coordination to ensure building and housing programs and policies are inclusive and address priority community needs.

IRA HOME REBATE PROGRAM RELEVANCE: SEOs can leverage this framework to identify social equity nexus points and incorporate related solutions into energy program design and implementation.

Resource Link: <https://www.usdn.org/projects/equity-in-buildings-framework.html>



2

Set clear program objectives and key results; adopt metrics to track progress

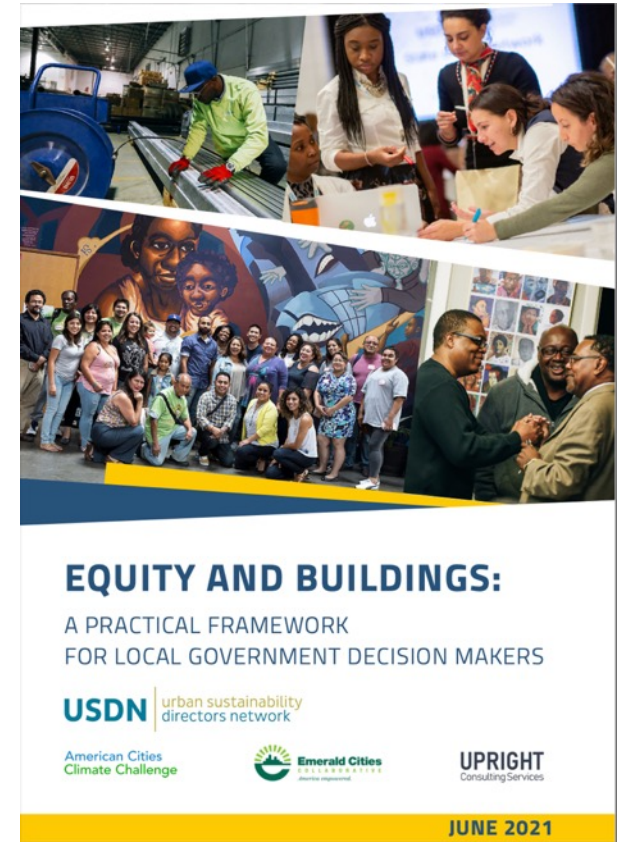


Image source/credit: Urban Sustainability Directors Network, June 2021, https://www.usdn.org/uploads/cms/documents/usdn_equity_and_buildings_framework_-_june_2021.pdf

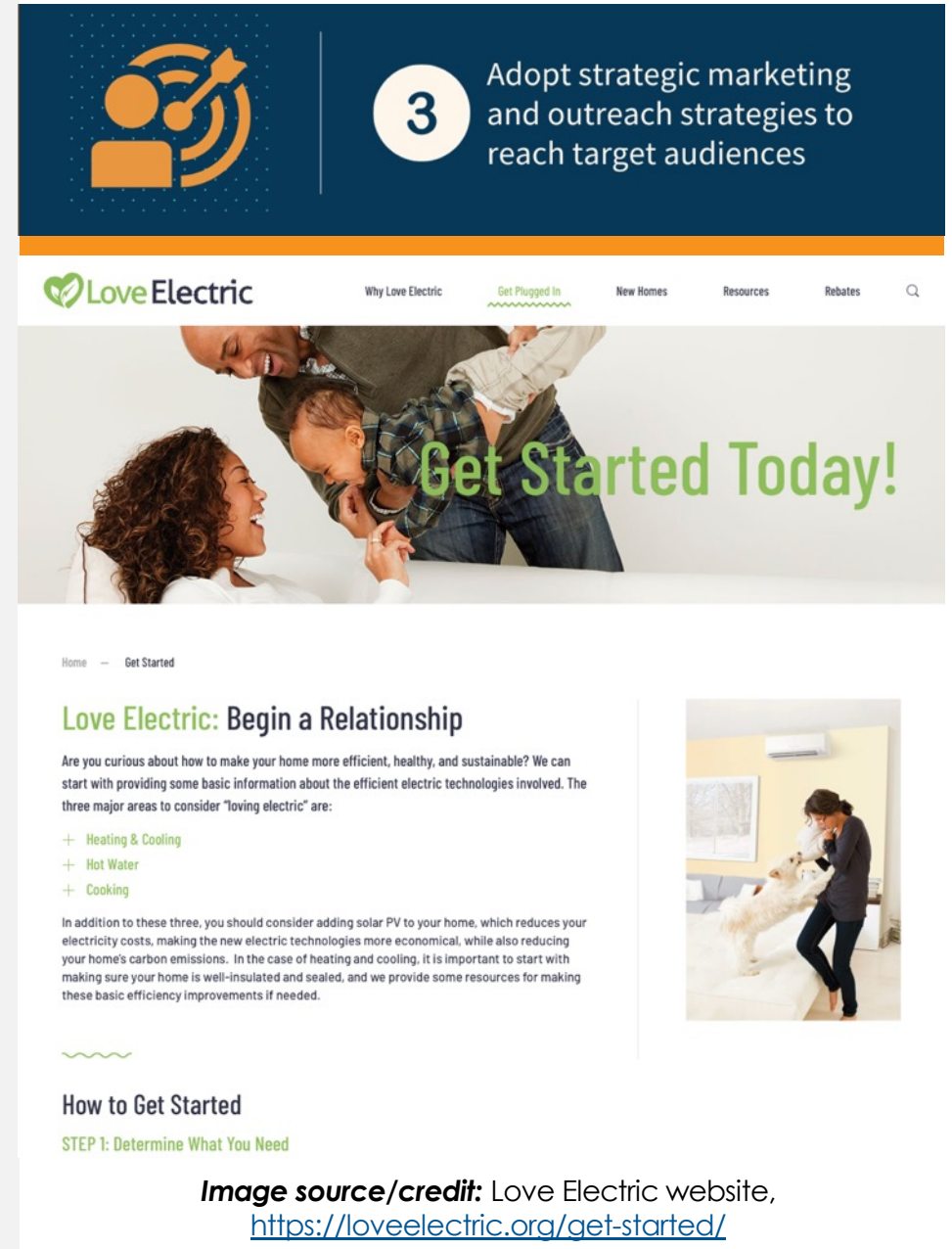
BENEFICIAL ELECTRIFICATION LEAGUE OF COLORADO - Love Electric

Notable Features:

- **Increases awareness and understanding** of home electrification technologies among households and contractors with a state-level campaign.
- **Provides a "One-Stop Shop" resource** with case studies, step-by-step guides, FAQs and other resources to help people electrify their home heating and cooling, water heating, and cooking.
- **Simplifies and streamlines** the process to identify locally available incentives, connect with certified contractors, and evaluate financing options.

IRA HOME REBATE PROGRAM RELEVANCE: Developing comprehensive online resources for households and contractors will help simplify the process, address common questions, and support rebate program participation.

Resource Link: <https://loveelectric.org>



The screenshot displays the Love Electric website interface. At the top, there is a dark blue header with an orange icon of a person and a plug, and a white circle containing the number '3' next to the text 'Adopt strategic marketing and outreach strategies to reach target audiences'. Below the header is a white navigation bar with the Love Electric logo and links for 'Why Love Electric', 'Get Plugged In', 'New Homes', 'Resources', and 'Rebates'. The main content area features a large image of a family smiling, with the text 'Get Started Today!' overlaid in green. Below this is a breadcrumb trail 'Home - Get Started' and a section titled 'Love Electric: Begin a Relationship'. This section includes a paragraph about making homes more efficient and a list of three major areas: Heating & Cooling, Hot Water, and Cooking. To the right of this text is a small image of a woman petting a dog. Below the list is a paragraph about solar PV and efficiency improvements. At the bottom, there is a section titled 'How to Get Started' with a sub-section 'STEP 1: Determine What You Need'. The footer of the screenshot includes the text 'Image source/credit: Love Electric website, https://loveelectric.org/get-started/'.

Image source/credit: Love Electric website, <https://loveelectric.org/get-started/>

BUILDING DECARBONIZATION COALITION - The Switch Is On

Notable Features:

- **Demonstrates benefits** of efficient home electrification, including improved indoor air quality, lower utility bills, and reduced carbon pollution.
- **Provides a "One-Stop Shop"** and **multilingual resource** with information on available incentives, a list of trained contractors, and the ability to connect with experts and ambassadors to discuss specific electrification questions.
- **Assists renters and multifamily buildings** with identifying income-qualifying programs throughout California.

IRA HOME REBATE PROGRAM RELEVANCE: Creating a statewide campaign and online resource help participants navigate program eligibility and enrollment, while also facilitating easy connections with experts and qualified contractors.

Resource Link: <https://switchison.org>



3

Adopt strategic marketing and outreach strategies to reach target audiences

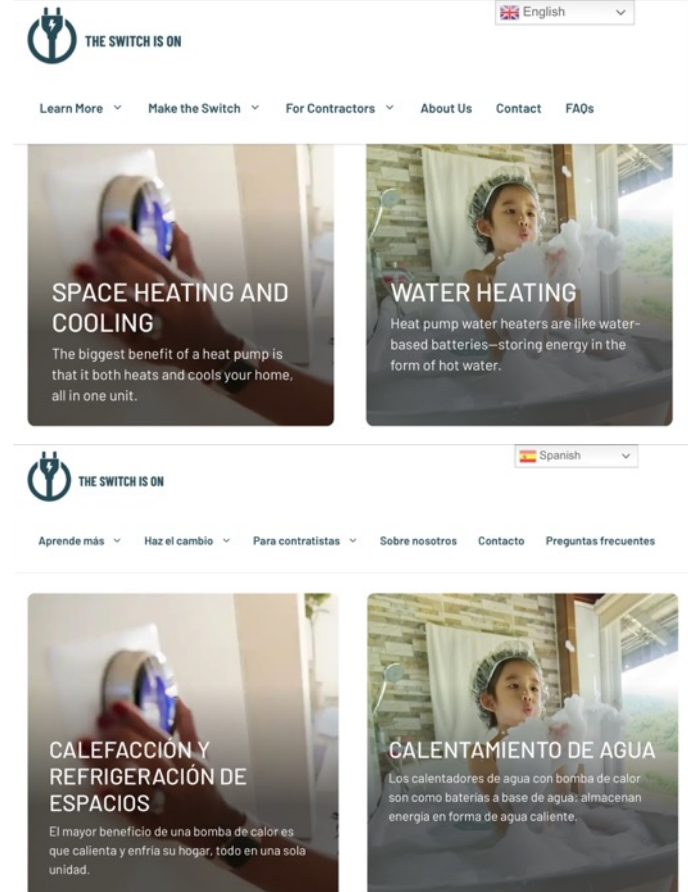


Image source/credit: The Switch is On website, <https://switchison.org/cooking/renters/>

BAYREN - Home Energy Advisor Program

Notable Features:

- Offers free consultation services to help Bay Area residents take advantage of available rebates and answer home retrofit project questions.
- Provides referrals to other programs for California households, multifamily property owners, and businesses.
- Leverages a Home Energy Score, provided by a professional, to identify current energy performance and high-value retrofit opportunities.

IRA HOME REBATE PROGRAM RELEVANCE: Investing in administrative support services will help households and contractors address questions before and during their projects, while streamlining enrollment in programs.

Resource Link: <https://www.bayren.org/energy-advisor>



4

Provide hands-on support to consumers and contractors



Image Source/Credit: Top: Bayren website, <https://www.bayren.org/energy-advisor>; Bottom: winnievinzence from [Noun Project](#), CC BY-NC-ND 2.0

ENERGY COORDINATING AGENCY - Neighborhood Energy Centers

Notable Features:

- Provides a “One-Stop Shop” resource on available energy service programs available to Philadelphia residents, including home energy retrofit incentives and utility bill assistance, as well as guidance for “DIY” energy upgrades.
- Invests in trusted neighborhood advisors and resource centers that connect with households to help navigate program eligibility and enrollment processes.
- Overcomes barriers to participation, such as language barriers and limited access to internet, to support equitable program enrollment.

IRA HOME REBATE PROGRAM RELEVANCE: Incorporating people-centered support models into program design can improve user experiences and support Justice40 equity outcomes

Resource Link: <https://www.ecasavesenergy.org/community-programs>



4

Provide hands-on support to consumers and contractors

Home PA Services Delaware Services Contact Support

Community Programs

As the name says, the Community Programs department does all things related to Philadelphia communities. From Neighborhood Energy Centers (NEC) where you could go for utility assistance, to free workshops for Philly residents. Community Programs is here to assist your community! Browse below for all things Community Programs.

Neighborhood Energy Centers

Your one-stop-shop for utility assistance, conveniently located throughout the city.

Find an NEC

Image source/credit: Energy Coordinating Agency website,
<https://www.ecasavesenergy.org/community-programs>

MASSACHUSETTS HEAT PUMP COACHES – Community Coaching Programs

Notable Features:

- Supports heat pump adoption in Massachusetts with locally trained energy coaches, on an as-available basis, that help people electrify home space and water heating.
- Empowers community members to lead on electrification to support local and state decarbonization efforts.
- Scales impact using a replicable model, leveraging published training guides and resources to support communities seeking to train additional energy coaches.

IRA HOME REBATE PROGRAM RELEVANCE: Harnessing the power of peer-to-peer connections can accelerate program marketing and reduce barriers to technology adoption.

Resource Links: <https://heatsmartalliance.org/coaching> and <https://concordma.gov/2777/HeatingCooling-Coaches>



4

Provide hands-on support to consumers and contractors

We reviewed all options with our coach. He was fabulous at explaining the different options, comparing the proposal costs, and suggesting questions to ask the installers. He is the wonder energy coach.



Shirley H.
Natick, MA



Image Source/Credit: Top: HeatSmart Alliance website, <https://heatsmartalliance.org/coaching/#CoachingCommunities>; Bottom: Town of Concord Massachusetts website, <https://concordma.gov/2777/HeatingCooling-Coaches>

American Council for an Energy-Efficient Economy - Empowering Electrification Through Building Envelope Improvements

Notable Features:

- Emphasizes weatherization as an energy retrofit strategy to maximize the economic, grid, and environmental benefits of home electrification
- Quantifies energy and monetary savings for single-family and multifamily properties in select cold climates across the U.S.
- Cross-references studies that detail numerous aspects of weatherization including air sealing, insulation, high-efficiency windows, and other measures

IRA HOME REBATE PROGRAM RELEVANCE: Program design should consider the interplay between weatherization and HVAC retrofits, supporting an optimized approach reflective of local economics and climate conditions.

Resource Link: <https://www.aceee.org/topic-brief/2023/07/empowering-electrification-through-building-envelope-improvements>



5

Make it economically beneficial to adopt efficient, all-electric technologies (and insulate financially vulnerable customers from bill increases)



Image Source/Credit: Nick Nguyen, Creative Commons, CC BY-SA 2.0

EFFICIENCY MAINE - Heat Pump Support

Notable Features:

- **Increases consumer understanding of heat pumps** via a user-friendly website with installation guidance, contractor listings, case studies, and FAQs tailored to Maine households.
- **Addresses economic impacts** with a home heating calculator that empowers households and contractors to estimate energy costs pre- and post-heat pump installation.
- **Dispels myths about home electrification** with resources on cold climate heat pump performance, operational considerations, and other common concerns.

IRA HOME REBATE PROGRAM RELEVANCE: Programs that provide comprehensive economic information, calculators, and other tools support informed consumer decision-making.

Resource Link: <https://www.energymaine.com/about-heat-pumps>



5

Make it economically beneficial to adopt efficient, all-electric technologies (and insulate financially vulnerable customers from bill increases)

The screenshot shows the Efficiency Maine website's 'Compare Home Heating Costs' calculator. The page includes a navigation bar with the Efficiency Maine logo, contact information (866-376-2463), and links for 'AT HOME', 'AT WORK', 'GREEN BANK', 'RESOURCES', and 'ABOUT'. The calculator's purpose is to estimate annual heating costs for different systems. It provides a list of 14 heating options, each with a fuel type, cost per unit, system name, and annual cost. The 'Calculate' button is highlighted in blue.

| Fuel Type (Units) | Cost per Unit Delivered | Heating System | Show Details | Annual Cost |
|-----------------------|-------------------------|-------------------------|--------------------------|-------------|
| Electric (kWh) | \$0.23 | Geothermal Heat Pump | <input type="checkbox"/> | \$ 1,681 |
| Firewood (cord) | \$350 | Wood Stove | <input type="checkbox"/> | \$ 1,717 |
| Electric (kWh) | \$0.23 | Heat Pump (ductless) | <input type="checkbox"/> | \$ 2,297 |
| Natural Gas (therm) | \$2.07 | Natural Gas Boiler | <input type="checkbox"/> | \$ 2,300 |
| Natural Gas (therm) | \$2.07 | Natural Gas Room Heater | <input type="checkbox"/> | \$ 2,351 |
| Wood pellets (ton) | \$312 | Pellet Stove | <input type="checkbox"/> | \$ 2,392 |
| Natural Gas (therm) | \$2.07 | Natural Gas Furnace | <input type="checkbox"/> | \$ 2,560 |
| Wood pellets (ton) | \$312 | Pellet Boiler | <input type="checkbox"/> | \$ 2,808 |
| Electric (kWh) | \$0.23 | Heat Pump (ducted) | <input type="checkbox"/> | \$ 2,871 |
| Oil (gallon) | \$3.54 | Oil Boiler | <input type="checkbox"/> | \$ 2,992 |
| Oil (gallon) | \$3.54 | Oil Furnace | <input type="checkbox"/> | \$ 3,328 |
| Propane (LP) (gallon) | \$2.98 | Propane Boiler | <input type="checkbox"/> | \$ 3,580 |
| Kerosene (gallon) | \$4.59 | Kerosene Room Heater | <input type="checkbox"/> | \$ 3,595 |
| Propane (LP) (gallon) | \$2.98 | Propane Room Heater | <input type="checkbox"/> | \$ 3,699 |

Image Source/Credit: Efficiency Maine website, <https://www.energymaine.com/at-home/heating-cost-comparison/>

ROCKY MOUNTAIN POWER - Wattsmart Trade Ally Program

Notable Features:

- Offers a searchable database of certified contractors, along with resources to support contractor co-branding for marketing to support the utility incentive programs.
- Provides online training for contractors with courses related to energy efficiency, heat pumps, and customer service.
- Certifies contractors through a trade ally enrollment process that streamlines understanding of utility rebate programs and installation requirements.

IRA HOME REBATE PROGRAM RELEVANCE: A dedicated contractor training and certification process, ideally in partnership with utilities, can support high-quality installations and provide ongoing opportunities for workforce engagement for program success.

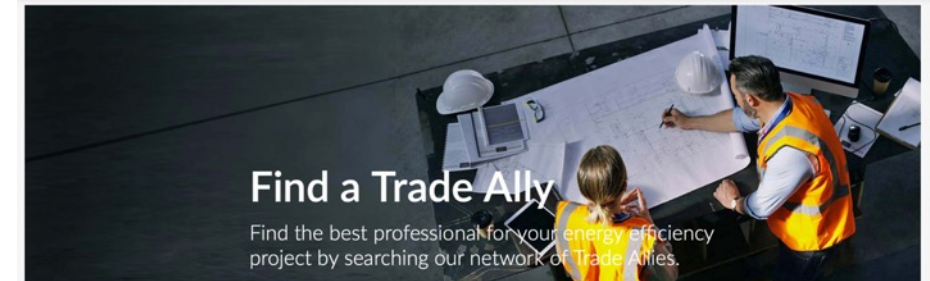
Resource Link: <https://wattsmarthomes.com/trade-allies>



6 Incorporate measurable customer experience and quality assurance protocols

WATTSMART®

ROCKY MOUNTAIN
POWER.
POWERING YOUR GREATNESS



SEARCH BY REGION

SEARCH BY BUSINESS NAME

Street Address, City, State or City, State

All Available Services

0 to 25 Miles

SEARCH



Image Source/Credit: Rocky Mountain Power Wattsmart website, <https://wattsmarthomes.capturesportal.com/Public/tradeallysearch/findatradeally>

NYSERDA - Clean Heat Connect

Notable Features:

- Builds connections to heat pump distributors and manufacturers to align business interests to support statewide adoption of heat pumps.
- Offers robust tools and trainings to contractors including installer reference materials, marketing and sales resources, and a hiring support guide.
- Incorporates in-person events to maximize networking benefits and catalyze business opportunities for installers, distributors, and manufacturers.

IRA HOME REBATE PROGRAM RELEVANCE: Addressing opportunities across the entire heat pump supply chain, including installers, distributors, and manufacturers, can support long-term market transformation and support for electrification and energy efficiency.

Resource Link: <https://cleanheatconnect.ny.gov>



7

Support durable market momentum and business model evolution with workforce and industry engagement



NYSERDA Workforce Development Programs
Hiring Support

Are you looking to hire clean energy technicians, installers, technical sales personnel, or interns? NYSERDA's Workforce Development programs can help.

In partnership with the NYS Department of Labor, NYSERDA offers two hiring support programs for wage reimbursement: one for new full-time hires and one for interns. A single application gives you access to both hiring programs.

| ON-THE-JOB TRAINING (OJT) Hiring Support | CLEAN ENERGY INTERNSHIP Hiring Support |
|--|---|
| <p>For full-time hires, NYSERDA will reimburse:</p> <ul style="list-style-type: none">• 50–75 percent of wages per new hire, up to \$24/hr., for 4–6 months. | <p>For interns, NYSERDA will reimburse:</p> <ul style="list-style-type: none">• 75–90 percent of wages per intern, on wages up to \$17/hr. |
| OJT Program Details | Clean Energy Internships Program Details |
| <ul style="list-style-type: none">• The size and type of business, and category of trainee, determine the amount of reimbursement.• Your business must be based in and operate in New York State and have a minimum of two employees.*• \$150,000 cumulative funding cap on new hires not currently residing in a disadvantaged community or from a priority population (see page 2 for definitions).• No funding cap when new hires are made from priority populations or disadvantaged communities. | <ul style="list-style-type: none">• The size of business determines the amount of reimbursement.• Your business must be based in and operate in New York State and have a minimum of two employees.*• An intern can work part time or full time. Eligibility is defined as a minimum of 80 hours over 8 weeks or a maximum of 480 hours within 1 year from date of hire.• May hire up to 7 interns at once, or a total of 30 over the lifetime of the program. |

*NOTE: If your business is New York State registered or New York City certified as a WBEMBE/SDVOB, 2 full-time employees are not required.

 **NYS Clean Heat**
Supported

Image Source/Credit: NYSERDA Clean Heat Connect website, <https://cleanheatconnect.ny.gov/assets/pdf/hiring-support-guide.pdf>



ENERGY
INNOVATION 
POLICY & TECHNOLOGY LLC®

This work is accessible under the [CC BY license](#). Users are free to copy, distribute, transform, and build upon the material as long as they credit Energy Innovation for the original creation and indicate if changes were made.

www.energyinnovation.org

