

ENERGY & CLIMATE COMMITTEE MEETING AGENDA - AMENDED

Tuesday, February 16, 2021, 3:00-5:00 PM Virtual Zoom Meeting*

Members:

Peter Hansel, Chair Andrew Dey

Cary Gaunt, Vice Chair Clair Oursler, Alternate

Ken Dooley
Jake Pipp Staff:

Jude Nuru Rhett Lamb, ACM/Community Dev. Dir.

Paul Roth Mari Brunner, Planner Zach Luse

- 1. Call to Order and Roll Call
- 2. Introductions
- 3. Review of ECC Purpose and Functions
- 4. Sustainable Energy Plan Implementation
 - a. Overview of Plan Vision and Implementation Pathways
 - b. Near-term Implementation Priorities
 - c. Next steps
- 5. Request: Letter of Support for KSC Sustainability Initiatives
- 6. Next Meeting: Wednesday, March 3, 2021
- 7. Adjourn

*TO JOIN THE MEETING:

The public may join the meeting online by visiting www.zoom.us/join or by calling the toll-free # (888) 475-4499 and entering the Meeting ID: 880 4041 9978. If you encounter any issues accessing this meeting, please call 603-209-4697 during the meeting. More info on how to access this meeting is available on the Energy and Climate Committee webpage at ci.keene.nh.us/energy-and-climate-committee.

Footnotes:

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Editor's note— Ord. No. O2018-04-A, adopted April 5, 2018, amended the title of div. 19 to read as herein setout. Formally said division was entitled "Cities for Climate Protection Committee".

Sec. 2-1088. - Purpose.

In order to protect Keene's public health, safety and welfare, as well as the economic vitality of the community, the energy and climate committee exists to:

- (1) Monitor and advocate for the reduction of greenhouse gas emissions,
- (2) Promote energy conservation and efficiency, as well as the use and production of renewable energy, and
- (3) Increase awareness of and resilience to the expected impacts of a changing climate.

(Ord. No. O-2005-03-A, 4-7-2005; Ord. No. O-2010-17, 9-16-2010; Ord. No. O-2018-04-A, 4-5-2018; Ord. No. O-2019-07-A, 4-18-2019)

Sec. 2-1089. - Membership.

The energy and climate committee shall consist of 11 regular voting members, one of whom shall be a member of the city council, all of whom represent a cross section of organizations, institutions, businesses and interests in the city. Membership shall not be restricted to residents of the city.

(Ord. No. O-2005-03-A, 4-7-2005; Ord. No. O-2007-10, 6-6-2007; Ord. No. O-2010-17, 9-16-2010; Ord. No. O-2013-9, 12-5-2013; Ord. No. O-2018-04-A, 4-5-2018; Ord. No. O-2019-07-A, 4-18-2019; Ord. No. O-2020-05, 3-19-2020)

Sec. 2-1090. - Terms.

Members shall be appointed for three-year terms.

(Ord. No. O-2005-03-A, 4-7-2005; Ord. No. O-2018-04-A, 4-5-2018; Ord. No. O-2019-07-A, 4-18-2019)

Sec. 2-1091. - Relation to department.

The community development department will provide staff support to the energy and climate committee. Other departments may be called upon as necessary.

(Ord. No. O-2005-03-A, 4-7-2005; Ord. No. O-2018-04-A, 4-5-2018; Ord. No. O-2019-07-A, 4-18-2019)

Sec. 2-1092. - Functions and guidelines.

The functions and guidelines in this section are established for the conduct of the energy and climate committee. The committee shall:

- (1) Coordinate the goals and measures of the local action climate plan in order to reduce greenhouse gas emissions and increase the community's adaptive capacity;
- (2) Update the local climate action plan and greenhouse gas inventory as deemed necessary;
- (3) Promote the awards and recognitions the city and community members have received for outstanding work in the climate protection arena;
- (4) Promote and report the successes and efforts of the committee to the council and community on a regular basis;
- (5) Advise city council on matters pertaining to the local climate action plan and sustainable practices such as energy conservation, energy efficiency, and energy generation and zoning practices;
- (6) Advise city council on matters pertaining to the city's interest at the state and national level in climate change policy;
- (7) Assist the city with community outreach and education for the local climate action plan by bringing the benefits of the plan to the attention of the public through educational materials, presentations, and other methods;
- (8) Assist with preparation of grant applications and pursue other funding mechanisms to implement the goals and measures of the local action plan;
- (9) Receive gifts and donations in the name of the city with prior approval of the city council; and
- (10) Perform such other related functions as required by the city council or as requested by the city manager.

(Ord. No. O-2005-03-A, 4-7-2005; Ord. No. O-2010-17, 9-16-2010; Ord. No. O-2018-04-A, 4-5-2018; Ord. No. O-2019-07-A, 4-18-2019)

	Tool / Strategy	Description	Sector(s)	Lead	Partners	Timeframe
	Benchmarking Program	Encourage building owners of certain sizes or in certain districts to report energy use data to the City.	Electricity, Thermal	City of Keene	Business community, large energy users	1-2 years
	Home Energy Labeling Program	Encourage energy efficiency disclosure for existing and new residential properties at the time a property is listed for rent or sale.	Electricity, Thermal	City of Keene	Association of Realtors, NEEP	1-2 years
ncy	Weatherization Program	Partner with existing weatherization programs to enhance public outreach and education, amplify impact, and increase capacity.	Electricity, Thermal	ECC/ City of Keene	SCS, Eversource, Keene Housing	1-2 years
Energy Efficiency	Complete Streets Program	Incorporate the adopted City of Keene Complete Streets Design Guidelines (2015) into the City's street standards for new streets, and develop Complete Streets standards for re-construction of existing streets.	Transportation	City of Keene	SWRPC, MAST, BPPAC	3-5 years
Ene	City Express Bus	Increase financial support for the City Express and Friendly Bus programs, and encourage HCS to expand services/routes.	Transportation	HCS	City of Keene, SWRPC	3-5 years
	Multi-Modal Transportation Center	Work with community partners to construct a multi-modal transportation center in Keene and promote inter-city transit options.	Transportation	City of Keene	SWRPC, Greyhound, HCS	5-10 years
	Advocacy for Public Transportation & Active Transportation	Advocate at the federal and state level for more funding to support public transportation and active transportation.	Transportation	ECC/City of Keene	MAST, MRCC	1-2 years
	Community Power Program	Establish a Community Power Program to aggregate community load and purchase electricity from an alternate electricity supplier.	Electricity	City of Keene	Cheshire County, Other towns	1-2 years
nergy	Virtual Power Purchase Agreement	Enter into a long-term, fixed price contract for renewable energy from a specific project (i.e. agree to a contract for differences, or CfD).	Electricity	City of Keene		3-5 years
Renewable Energy	Pilot Battery Storage Program	Collaborate with Eversource to provide a pilot batter storage program for residents and businesses to reduce demand on the grid during peak times.	Electricity	Eversource	City of Keene	3-5 years
Renev	Renewable Energy Loans	Partner with a local financial institution to create a loan product to finance renewable energy installations targeted at businesses or residents.	Electricity, Thermal	Financial Institution(s)	City of Keene	3-5 years
	Solar & EV Ready Guidelines	Adopt Solar & EV Ready Guidelines to encourage new buildings to be built in a way that accommodates future solar installations.	Electricity, Thermal, & Transportation	City of Keene		1-2 years

	Tool / Strategy	Description	Sector(s)	Lead	Partners	Timeframe
Fuel Switching	Heatsmart Campaign	Host a "Heatsmart" campaign to encourage the installation of renewable thermal technologies for space heating and cooling or for hot water heating through targeted local out-reach efforts and bulk discount prices.	Thermal	ECC / Community Volunteers	City of Keene, Local contractors	1-2 years
	Public EV Charging Stations	Install public EV charging stations (level 2 and fast-charge) in onstreet parking areas and in public parking lots or structures.	Transportation	City of Keene	Eversource	1-2 years
	Electric Buses	Work with the Keene School District/local school bus company and HCS (City Express and Friendly Bus) to encourage switch to electric buses.	Transportation	First Student / HCS	SAU 29	5-10 years
	Advocacy for EVs and Alternative Fuel Vehicles	Advocate at the federal and state level for more funding to support EVs and other alternative fuel technologies.	Transportation	ECC/City of Keene	MAST	1-2 years
	Renewable District Heating system	Commission a study to assess the potential for a renewable district heating system in Keene to understand what areas of the city would have the appropriate demand characteristics to justify a district energy system, as well as what local renewable sources are available and at what potential and likely cost.	Electricity (co- generation), Thermal	City of Keene		3-5 years

Table 5.1 Priority implementation strategies and actions for the Keene Sustainable Energy Plan.

HOME ENERGY LABELING PROGRAM

Overview

A Home Energy Labeling program provides an assessment of a home's energy performance, typically in MMBtu/year, and compares it to that of other similar homes. It uses the same approach as other labeling programs, such as miles-per-gallon ratings on cars, nutrition labels on food, and Energy Guide labels on appliances, to compare two "products." Homebuyers, homeowners, and renters can use this information not only to estimate energy use, but also to estimate energy costs and potential energy efficiency upgrades to make a home more comfortable and less expensive to run. When properly designed, home energy labels allow the consumer to make an informed decision about home purchases, rentals, or upgrades they can make.

A key benefit of Home Energy Labeling is its ability to help overcome the "split incentive," an often-cited barrier to energy efficiency for homes and rental properties. For new homes, the split incentive arises when builders have little or no incentive to build to higher efficiency standards, which is largely invisible to homebuyers and increases the build cost. A home energy label addresses this by adding visibility to the energy costs of operating a home, which in turn increases the marketability of homes that are more efficient and helps builders sell more quickly and for a better price. 6 With rental properties, the split incentive arises when the building owner, who is responsible for maintenance and major appliances, does not pay for the energy that the building uses. In this case, a home energy label allows renters to understand how much they can expect to pay for utilities and more accurately compare the options available to them.

Common Components of a Home Energy Label:

- Home profile (year built, area, # of bedrooms).
- Details about home's current structure and systems.
- Home Energy Score, Energy Star score, or similar rating.
- Annual energy use and cost based on energy modeling.
- Home's carbon footprint.
- Custom energy improvement recommendations.

Local governments can adopt a Home Energy Labeling program to encourage or require a home energy label in real estate listings, at time of sale, point of lease/rental, at time of building renovation, and/or when major systems are replaced. Mandatory programs have higher rates of participation; however, the recommendation in this plan is for the City to adopt a voluntary program.

A variety of rating systems can be used for the scorecard, including DOE Home Energy Score (HES), RESNET Home Energy Rating System (HERS) rating, ENERGY STAR Certified Homes (HPwES), and state-created stand-alone scorecards (which are often tied to the modeling engines of other labels like HERS or HES). The scorecard should be designed to include metrics that are clear and easy to understand, are aligned with local and state policy goals, and allow for tracking progress on those goals. An example scorecard from Efficiency Vermont is shown on the next page.

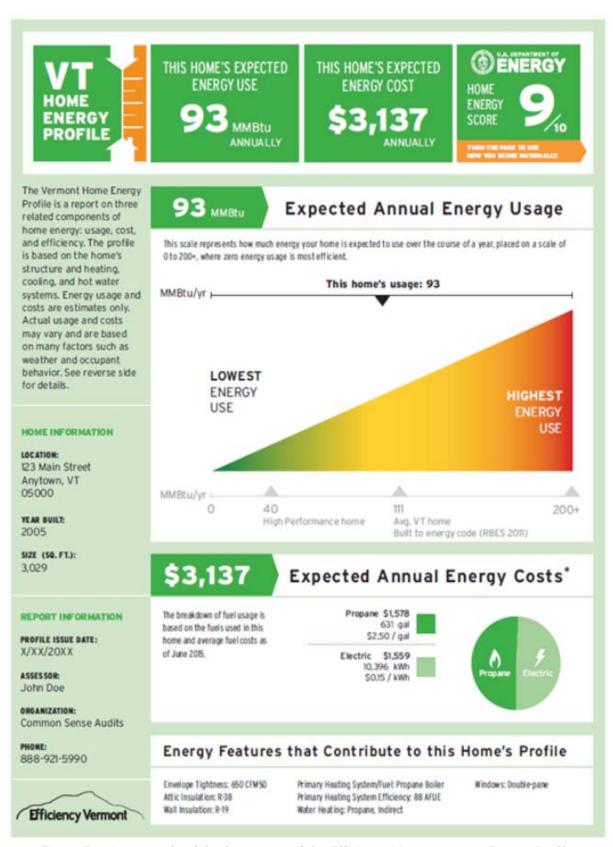


Figure 5.1. An example of the front page of the Efficiency Vermont Home Energy Profile.

Key Benefits and Challenges

Key Benefits	Key Challenges
Identifies rental properties and homes in Keene that could benefit most from energy efficiency improvements.	Participation rates associated with a voluntary program are often very low.
Applies to both existing housing stock and new homes.	Energy labeling alone does not guarantee energy-efficiency upgrades and improvements.
Provides consumers with greater transparency and a measure of protection when making large financial investment in a home or rental.	A large investment of time and respources in outreach is required in order to increase participation rates.
Helps to overcome the "split incentive" for rental properties and construction of new homes.	Administrative burden associated with ongoing support and management of the program
Potential to link financial incentives to energy-efficient upgrades	Requires buy-in and support from stakeholders groups including builders, real estate professionals, and contractors / appraisers.

Implementation Steps

Implementation Steps			
✓	Review policies and ordinances from other communities to evaluate options for program design, requirements, and incentives being utilized by other localities.		
✓	Develop program with input from key stakeholder groups.		
✓	Develop or enhance a webpage to host relevant resources and materials.		
✓	Determine which metrics will be disclosed publicly.		

Examples from Other Communities

This section includes communities that have implemented Home Energy Labeling programs in the US. Each example includes a few key points and differentiating factors as well as a hyperlink to each program page. All of the ordinances listed below involve mandatory reporting requirements and utilize a variety of tools for reporting. For a state-by-state list of home energy labeling programs in the Northeast and Mid-Atlantic, see the Northeast Energy Efficiency Partnerships Residential Labeling Dashboard.⁷

Home Energy Score Ordinance: Portland, Oregon

The City of Portland adopted the Home Energy Score Ordinance in December 2016, which went into effect just over a year later in January 2018. The ordinance requires sellers to obtain a home energy performance report prior to listing their properties. The report must contain the DOE Home Energy Score and must be provided to prospective buyers and included in the real estate listing. Home Energy Score data is entered into a local Green Building Registry, which then auto-populates Portland's local multiple listing service, which in turn, populates several consumer-facing real estate portals, such as Zillow and Trulia. Sellers who fail to comply with the ordinance receive a warning notice, and if the seller does

not take corrective action within 90 days, they must pay a fine of \$500. The City of Portland maintains a dedicated webpage with information, tools, and resources to help support homeowners with compliance - www.pdxhes.com.

Rental Housing Time of Sale Energy Efficiency Ordinance: Burlington, Vermont

In order to strengthen the City's response to the "split incentive paradigm" and increase energy efficiency in rental housing, the City of Burlington, VT adopted a "Time of Sale Energy Efficiency Ordinance" which mandates that cost-effective energy efficiency standards be met when buildings are sold and inspected every 1 to 5 years.⁹ This ordinance only applies to rental properties where tenants pay directly for heating costs. In addition, the program has a built-in cap on costs in order to mitigate pass-through of costs to tenants.

Building Energy Saving Ordinance: Berkeley, California

Berkeley's Building Energy Saving Ordinance (BESO)¹⁰ applies to 1-4 unit homes in addition to buildings of a certain size or greater. Homeowners are required to get a Home Energy Score prior to sale. However, this requirement may be deferred to the buyer for up to 12 months at time of sale. Data from the first year of the ordinance shows that the majority of homes scored lacked proper insulation and had single paned windows. The three most common recommendations included in Berkeley Home Energy Score reports to date have been floor insulation, attic insulation and air sealing, and installing a central gas furnace. In a recent report that evaluates the BESO program, recommendations for improving the program for 1-4 unit homes include requiring the Home Energy Score at time of listing rather than at time of sale, among other recommendations.¹¹

SUPPORT & ENHANCE EXISTING WEATHERIZATION PROGRAMS

Overview

This strategy leverages existing programs and seeks to extend the reach and/or enhance the impact through local volunteer support for outreach, education, and marketing. In addition, it is possible that additional financial support could extend the eligibility of these programs to currently ineligible households.

There are a couple well-established, existing weatherization programs available to homeowners, renters, and businesses in Keene, as well as new program that is in the works:

- NHSaves is a collaboration of New Hampshire's electric utilities working with the New Hampshire Public Utilities Commission and other interested parties. The program provides links and information on how customers can qualify for rebates and other incentives, including commercial and industrial energy efficiency options.12 According to Frank Melanson, Supervisor in Energy Efficiency with Eversource, the High Performance with Energy Star (HPwES) program, which assists homes with high heat fuel usages to transition to energy efficient appliances, has reached 17 households in Keene in the past 5 years, nearly doubling their 2018 totals in 2019 due to the success of the program. The Home Energy Assistance Program (HEA) has worked closely with Keene Housing and saw a dramatic increase in income eligible homes who are served by this program in recent years. In total, HEA has reached 124 homes in Keene in the past three years, 116 of which were in 2019. NH Saves Energy Efficiency Department predicts HEA will reach over 200 homes in 2020.
- Southwestern Community Services (SCS) Weatherization Assistance Program is designed to help reduce heating and other energy costs for income eligible households by improving living conditions and providing warmer, safer, and more comfortable homes. It also aims to lower energy costs by 19 to 22 percent. Priority is given to the elderly, the disabled, and households with small children. Eligibility for the program is determined by gross household income and vulnerability to heating and electricity costs.13 In addition, the SCS Heating Repair and Replacement Program (HRRP) can help clients repair or replace their heating systems. Recipients must be income-eligible and receiving fuel assistance in order to qualify for HRRP. Assistance for heating replacement is based on availability of funds.
- The City of Keene, SCS, and other potential partners are in the process of creating a program to update and weatherize homes in Keene's "middle" neighborhoods. Middle neighborhoods are places where home prices and rentals are generally affordable, but are often on the edge between growth and decline. These neighborhoods are not thriving enough to attract sustained private investment, yet are not troubled enough to warrant government intervention. They are in desirable locations near the downtown and employment. This concept, called "21 in 21," is intended to help coordinate repairs to buildings in order to abate housing/safety/zoning issues, enhance safety, increase

energy efficiency (defined as a Home Energy Score of 7 or better), improve curb appeal, and increase home ownership opportunities, which is positively associated with social capital.

By hosting local Button-Up Workshops, organizing weatherization campaigns run by a group of volunteers, or even cost sharing to hire a local or regional NHSaves representative, the reach and efficacy of these programs could be increased by building off of their existing successes.

Keys Benefits and Challenges

Key Benefits	Key Challenges
Leverages existing program structure and design + builds on pre-existing success.	Would require an engaged group of volunteers with a high time commitment.
Takes advantage of utility/state funding, technical expertise, and preexisting infrastructure and programs.	City not in direct control of program development and implementation + success is largely dependent on Eversource / SCS being active + willing participants.
Helps lower energy costs for residents and businesses.	Need to identify the right points of contact at all participating organizations. Partnership may require connection at the upper management/admin level.
Potential to expand the reach of existing programs to residents and businesses who do not currently qualify.	Due to the high percentage of rentals in Keene, overcoming the split incentive for rental properties could be a major challenge.
Opportunity to support local economy by engaging with local contractors.	

Implementation Steps

Implementation Steps			
✓	Reach out to Eversource and/or SCS to discuss potential opportunities to collaborate on an existing weatherization program.		
✓	Reach out to local energy groups / advocates to assess level of interest in volunteering or otherwise supporting a local weatherization program.		
✓	Assign resources (volunteers, City staff time, and financial commitments).		
✓	Develop or enhance a webpage to host relevant resources and materials.		
✓	Measure and track metrics to evaluate program impact.		

Examples from Other Communities

This section includes examples of how communities have partnered with existing programs and utilities to enhance weatherization efforts.

Weatherize Upper Valley: Weatherize Campaigns

Coordinated by the nonprofit organization Vital Communities, Weatherize Upper Valley enlisted community volunteers to join local outreach teams responsible for increasing participation in existing energy efficiency programs in New Hampshire (NHSaves) and Vermont (Efficiency Vermont). Energy consultants offered free or discounted home energy consultations, and the volunteer teams helped generate leads for the contractors, helping justify the discounted services. This approach created economies of scale in small communities and made the vendor selection process easier for participants. According to the Island Institute 2018 report, "Bridging the Rural Efficiency Gap," Pilot Weatherize campaigns in 14 Vermont towns resulted in 100 weatherization projects in just six months, an increase of 40% above their typical annual average. During the program's second round, six New Hampshire towns with virtually no history of weatherization projects helped weatherize over 90 homes with help from seven New Hampshire contractors.

Rural Alaska Community Action Program: Energy Wise Outreach Program

The Rural Alaska Community Action Program (RurAL CAP), formed in 1965, piloted their "Energy Wise" program in 2009 to help Alaskans reduce energy consumption, create local jobs and training opportunities, and save on electric bills and home heating costs. However, in an assessment conducted in 2011, insufficient public awareness was identified as a major barrier to program success. In order to address this barrier and improve public education and outreach, RurAL CAP developed a Community Energy Education Kit that utilized the existing infrastructure of the Energy Wise Program to pilot a public education delivery system. This system included the creation of nine different "Booth in a Bucket" hand-on science kits, which were featured at energy fairs in 13 Alaskan communities. RurAL CAP also created a "how-to" guide to replicate the bucket booth and energy fair model in other communities.

ADVOCACY FOR PUBLIC TRANSPORTATION & ACTIVE TRANSPORTATION

Overview

In New Hampshire, the vast majority of funding for public transportation and active transportation such as walking and bicycling comes from the federal or local level, with very little financial support from the state. New Hampshire ranks 44th in the nation in state spending per capita on public transit,³⁷ and the League of American Bicyclists ranks New Hampshire 47th in the nation for state funding for bicycle infrastructure.³⁸ A lack of funding from the state places a higher burden on local communities to provide matches for federal grants and programs. For example, Home Healthcare, Hospice and Community Services (HCS), which runs the City Express Bus (fixed route) and Friendly Bus (demand response), relies on municipal and charitable contributions to provide matches to federal grants and keep its transportation services in operation.³⁹

The City should be an active participant in regional and statewide transportation planning processes, and should consider advocating for more state and federal funding for infrastructure and programs to support public transportation and active forms of transportation. These efforts should focus not only on the environmental benefits of public transportation and active transportation, but also co-benefits such as reduced congestion, improved air quality, increased mobility, reduced household expenditure on transportation, energy efficiency, and improved health outcomes through increased social inclusion and physical activity. Key partners for this strategy include local transportation providers such as HCS and the Community Volunteer Transportation Company (CVTC), the Monadnock Region Coordinating Council for Community Transportation (MRCC), Southwest Region Planning Commission (SWRPC), Monadnock Alliance for Sustainable Transportation (MAST), the National Complete Streets Coalition, the League of American Bicyclists, and other local, state, and national organizations with a focus on transportation planning and/or advocacy.

HEATSMART CAMPAIGN

Overview

Heatsmart campaigns (also called "thermalize") are a community-based outreach and education tool that aims to increase adoption of renewable thermal technologies such as air source heat pumps, solar thermal, wood pellets, and ground source heat pumps. In addition, some campaigns have encouraged homeowners to consider energy efficiency improvements and home weatherization upgrades. Heatsmart leverages partnerships with installers, group purchasing power, and volunteer energy to provide focused community outreach and education around renewable thermal technologies, reduce logistical and financial barriers to participation, and reduce heating and cooling costs for residents and small businesses.

Renewable thermal technologies are relatively unknown by most customers, and as a result, the "soft costs" of educating consumers can be a barrier for contractors making sales. Heatsmart campaigns use the same model as "solarize" to promote public awareness of renewable thermal technologies, increase consumer confidence, and help reduce customer acquisition costs for installers. A successful campaign should include the following⁶²:

- Outreach to local contractors in advance of program launch to ensure they understand the goals of the program, how to position themselves to participate, and how to successfully leverage the program to generate leads. Due to the nature of the HVAC contractor industry, which is typically composed of smaller, more localized firms, it may be worth exploring a contractor arrangement that utilizes multiple installers in a campaign in order to address concerns such as perceived favoritism, challenges in meeting a sudden surge in demand, and sensitivity of smaller firms to competition from larger external firms.
- A dedicated campaign leader and a team of community volunteers are critical to the success of a program. The leader and volunteers manage the program, plan and coordinate events, serve as a point of contact, and provide the "boots on the ground" for one-on-one outreach.
- **Support or sponsorship from a trusted organization** helps to build trust and increase consumer confidence in the program. Often, local governments will play a role in organizing or supporting a program, especially if it is aligned with local policy goals.
- **An easy sign-up process** is essential to make it as easy as possible for people to participate in the program.
- Consistent messaging and coordinated outreach are necessary to drive participation in the program and overcome barriers such as lack of awareness / familiarity with renewable thermal technologies and available financial incentives and programs.

A limited sign-up period with deadlines for customer enrollment. This helps to create
a sense of urgency and drive higher participation rates; however, the program length
should be longer than a typical solarize campaign to build in extra time for education,
outreach, and messaging to overcome lack of consumer awareness / familiarity with
renewable technologies.

Keys Benefits and Challenges

Key Benefits	Key Challenges
Reduces technical and financial barriers to renewable thermal adoption over the short-term.	If offering a diversity of renewable thermal technologies, the potential to achieve economy of scale is diluted and may affect ability to offer discounts.
Helps to build a local installer base and support existing contractors.	Potential for unforeseen installation costs and heating system upgrades (i.e., upgrading electrical system to accommodate an air source heat pump), which can add to overall costs
Existing federal and state rebates and loans are already available to reduce up-front costs of installation and improve rate of return on investment.	Explaining the complexity of the various renewable thermal technologies and how they integrate with existing heating systems presents a challenge for outreach and education.
Effective strategy for raising consumer awareness and increasing confidence in renewable thermal technologies.	Barriers to participation from low and moderate income households without additional funding to provide affordable access.
Opportunity to pair program with energy efficiency and weatherization programs and/or financial incentives, such as local or utility rebates.	Overcoming the split incentive for rental properties where the building owner does not pay for energy use.

Implementation Steps

Implementation Steps			
✓	Identify a local champion to serve as a team lead. A successful program hinges on having a local champion or group of champions to run and manage the program and coordinate volunteers.		
✓	Reach out to local installers during program design phase. Local HVAC contractors should be engaged early on so that their perspectives and concerns can be addressed through the local program design.		
✓	Review examples from other communities and identify structure/design of a Keene-specific program. Heatsmart campaigns are less established than solarize campaigns, and there are various different models that Keene can learn from. The design of a local program should be informed by best practices and lessons learned from other communities, as well as the unique characteristics of Keene.		
✓	Identify community partners to help amplify messaging and outreach. For example, Northampton, MA's initial Heatsmart campaign was a collaboration between the City of Northampton Energy and Sustainability Department, Mothers Out Front, and Climate Action Now – Western Massachusetts.		

Examples from Other Communities

This section includes examples from communities that have implemented a Heatsmart campaign. Information in this section was taken from the Clean Energy States Alliance June 2019 report, "Community Campaigns for Renewable Heating and Cooling Technologies: Four Case Studies." ⁶³

Northampton, MA: 2017 / 2018 HeatSmart Campaign

The first iteration of this program, which ran from August 2017 through February 2018, focused on cold climate air source heat pumps and owners of one- to four-unit residential buildings. The project lead was the City's Energy and Sustainability Officer; however, the program relied heavily on volunteers to provide outreach. Goals of the program included increased awareness of air source heat pumps and their benefits, increased adoption of air source heat pumps, reduced costs associated with air source heat pump installations, and reduced greenhouse gas emissions. Program outreach included "Meet the Installer" workshops, open houses at the homes of residents with air source heat pumps, social media and other online outreach, media placements in newspapers, TV, and radio, signage, direct mailings, and tabling at farmer's markets and other local community events. The program resulted in 162 people who expressed interest, 130 installer site visits, and 106 price quotes, and 54 installed air source heat pump systems. Of the systems installed, there were 19 single-zone, 34 multi-zone, and one heat pump water heater.

Boulder, CO: Comfort365 Program

Launched in April 2018, the Boulder Comfort365 program provides information and resources related to air source heat pumps and helps to connect interested consumers with EnergySmart-registered contractors, evaluate contractor bids, and access rebates and incentives at no charge. The first iteration of this campaign, which ran throughout the spring and summer, focused on the cooling aspect of heat pumps, and the second on the heating aspect. The City of Boulder and Boulder County spearheaded the program, providing free one-on-one time with personal energy advisors, access to a broad array of incentives and rebates, and assistance evaluating bids from prequalified, vetted contractors. Through a collaboration with Mitsubishi, the outreach efforts of the City and County were complemented by a regional marketing campaign that included paid advertisements, Google ads, and television marketing. Comfort365 estimates that the program resulted in the installation of 66 air source heat pumps in 2018, and set a goal of 120 installations for 2019.

ADVOCACY FOR EVS AND ALTERNATIVE FUEL VEHICLES

Overview

Of the 30.9 million dollars that New Hampshire received through the Volkswagen Environmental Mitigation Trust, New Hampshire can use 15 percent towards acquiring, installing, and operating electric vehicle charging equipment. There are currently no Level 3 fast charging stations in Keene or in Cheshire County, making Keene part of an "EV Desert."

Keene should advocate at the federal and state levels for more funding to support EVs, EV charging equipment, and other alternative fuel technologies. If Keene both increases its renewable portfolio and supports a shift to electric vehicles, then the City can move towards a transportation sector powered by renewable energy.

At the state level, the City should be an active proponent of using Volkswagen funds for the installation of a Level 3 fast charger in Keene. If the New Hampshire Department of Environmental Services releases a new RFP for fast charging infrastructure, the City should submit a proposal or assist community partners in their applications. In addition, the City should encourage the State to formally join the Transportation and Climate Initiative, a regional collaboration of 12 Northeast and Mid-Atlantic States and the District of Columbia that seeks to improve transportation, develop the clean energy economy and reduce carbon emissions from the transportation sector. In addition, the City should advocate for the state to join the Zero Emissions Vehicle (ZEV) program, which requires increasing sales of ZEVs over a 10-year period. ZEVs include AEVs, hydrogen fuel cell vehicles, and PHEVs.

At the federal level, the City should advocate for an expansion of the federal tax credit for plug-in electric vehicles. Under the current federal tax credit, automakers have a cap of 200,000 sales that are eligible for up to a \$7,500 tax credit. If the automaker hits that cap, then the amount of the tax credit goes down.⁷¹ Increasing the cap beyond 200,000 will allow more prospective buyers to receive the full \$7,500 credit, which could incentivize EV adoption.⁷²