

### **Home Energy Information Guide**

Here is everything you need to know about getting a Vermont Home Energy Profile (VHEP) for your home. This guide provides step by step instructions on how to use Energy Estimator, powered by <u>HELIX</u> and <u>ClearlyEnergy</u> to create your profile.

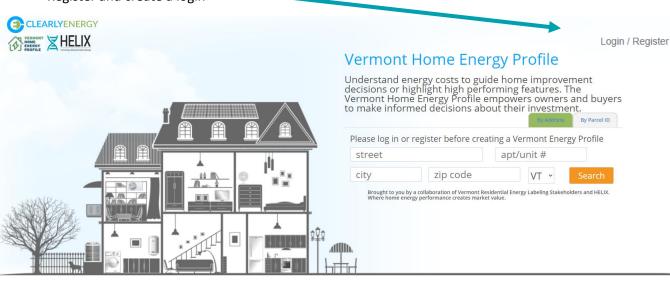
With this guide, you can create your VHEP in four easy steps:

- 1. Register and Create a Login
- 2. Claim your home
- 3. Review and edit (optional) your home features
- 4. Create your VHEP

Vermont Home Energy Profile (VHEP) Guide

#### Step 1: Getting started

- Go to VHEP Site
- Register and create a login





You will receive an email from ClearlyEnergy with the subject line "Confirm ClearlyEnergy Registration".
 Be sure to check your junk folder if you do not see it in your main inbox. You will need to confirm your account and login.

#### Once you have logged in

• You can search for your home by address or Parcel ID.

<sup>&</sup>lt;sup>1</sup> https://neep.org/initiatives/energy-efficient-buildings/green-real-estate-resources/helix

<sup>&</sup>lt;sup>2</sup> https://www.clearlyenergy.com/



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- A Parcel ID is a number assigned to parcels of real property by the tax assessor of a particular jurisdiction for purposes of identification and record-keeping.
- If your home was found in the system: When you hit search, a screen will appear stating the address has been verified.
- On the same screen, you can review the four easy steps to creating a profile: 1) Register and Create a Login, 2) Claim your Home, 3) Edit Home Features, 4) Create Vermont Profile
  - o From here, click Start Your Profile.

#### Four Easy Steps to Creating a Vermont Home Energy Profile

The buttons at the top of the page will guide you to the next step:



#### 1. Register and Create a Login

You will receive an email from ClearlyEnergy with the subject line "Confirm ClearlyEnergy Registration". Be sure to check your junk folder if you do not see it in your main inbox. You will need to confirm your account and login.

#### 2. Claim Your Home

In order to claim your home, be sure to login and find your address. Press the "Claim Your Home" button in order to edit your home's features and create the Vermont Home Energy Profile.

#### 3. Edit Home Features

You will see a pencil icon next to the features you are now able to edit. You can optionally update information about your home, its energy systems or enter utility and fuel costs.

#### 4. Create Vermont Profile

After you have updated your home features, click the "Create Profile" button to generate your Vermont Home Energy Profile. Once you have created your profile, you will be able to view and download it by clicking on the "View Profile" button.

Start Your Profile

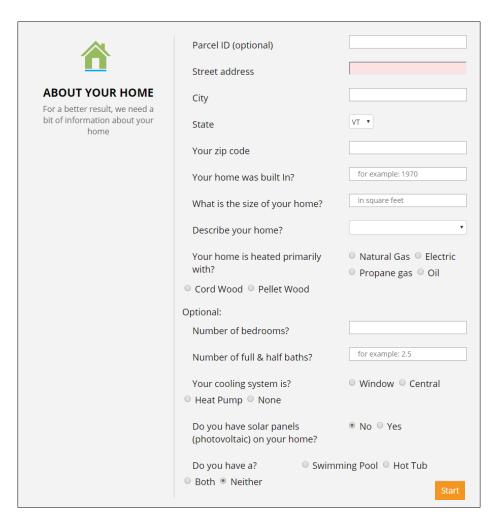
- If your address was not found in the system, you will be brought to a screen, like below, to calculate your home's average energy use.
  - You will have to include the address, year the home was built, size, type of home, and primary heating fuel. There are additional metrics you can choose to fill in.

#### No Data Was Found For This Home

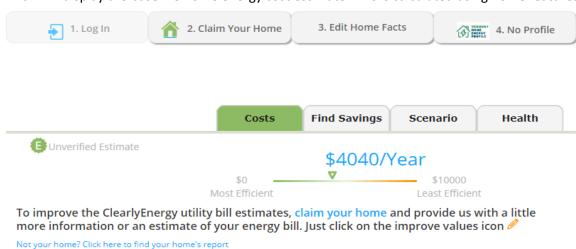
Please use this energy calculator to find out your home's energy use, and receive personalized strategies to cut those costs!







When your address is found or filled out (pictured above), you will be brought to the following screen,
 which will display the baseline home energy cost estimate. This is calculated using home features from





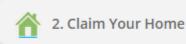
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public tax assessor data and HELIX data when available. The baseline home energy cost estimate may not reflect what you entered into the tool. The tool normalizes for weather, occupancy, and thermostat settings – this may cause the baseline estimate to not accurately reflect what you have entered into the VHEP. This allows for a way to know how energy efficient one home is compared to another.

In order to edit the features of your home, you'll need to "claim your home".

#### Step 2: Claiming Your Home

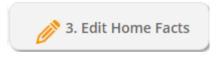
• Once you have logged in and found or added your home, press the "Claim Your Home" button in order to edit your home's features and create the Vermont Home Energy Profile.



- When you press Claim Your Home, you will be prompted to check two boxes.
  - O By checking this box, you are confirming that you are the property owner or can act on behalf of the property owner (e.g. seller's agent, energy professionals completing the VHEP on behalf of the homeowner). Additionally, you are confirming that you will provide correct information to the best of your ability. This first box must be checked in order to edit your home's features.
  - The second box should be checked if you want to prevent other users from editing the home's energy features. By checking this box, the home energy features will be locked from editing by others for 30 days. After 30 days the home is unlocked. Do not check this box if you plan to have other users (spouse, contractor, etc.) modify your home data.
- Once you check the box(s), click Claim.

#### **Step 3: Editing Home Features**

You will see a pencil icon next to the features you are now able to edit. You can optionally update information about your home, its energy systems or enter utility and fuel cost.



- Review the assumptions about your home such as insulation levels, heating system information, and appliances. To update any features and reflect the current state of your home, you will need to be logged in and have claimed your home.
- Click on the pencil icon to make edits.
- Once you have made edits, click **Update Values**.

## Home Features

Update general home facts





This will allow you to indicate if you have completed a professional energy audit, indicate the size, age, and type of home you have (e.g. single family standalone home), specify if your home is divided into multiple units, describe your basement (if applicable), if you have a programmable thermostat, if association fees cover utility costs, and if you have an electric vehicle/charging station, a hot tub or swimming pool.

#### Enter utility and fuel costs

- This section allows you to enter actual utility bill information that will calibrate the tool's energy
  cost estimate. You can also indicate primary space and water heating fuel, the number of people
  living in the home, and the temperature you keep the home during the winter and summer.
- Note: The tool's energy cost estimate is an asset-based score which considers the physical
  assets of a home such as the existing insulation levels, HVAC systems, and hot water systems.
  Asset-based scores do not consider the operational aspects including thermostat temperature,
  number of occupants, etc. Inputs for the utility bill section are used to normalize results for
  those aspects and other considerations like weather.

## **Heating Costs**

• Update heating equipment and insulation details. If you know the answers to these questions, feel free to fill them in. If you are unsure, you can leave them blank. This page includes information on your heat system(s), any secondary/back-up heating systems, hot water heater, windows, attic and wall insulation, and overall air tightness of your home.

## Cooling Costs

Many homes use window air conditioning units or central air conditioning. By editing this section, you
are able to indicate what type of air conditioning your home uses, if any.

## Lighting & Other

 Here you can indicate what type of bulbs you use in your home, as well as the use (low, normal, high) of devices and electronics (TVs, microwaves, fans, humidifiers, computers).

## Appliances Ø

- You can edit the number of kitchens in your home. This is important if you have an in-law suite, or if the building is multifamily.
- Refrigerator: indicate the type and age of your fridge, as well as if it is ENERGY STAR certified. If you have a second fridge or freezer, you are able to indicate that here as well.
- You can indicate if you have a dishwasher, as well as how old it is and if it is ENERGY STAR certified.
- You can identify the type of clothes washer you have, as well as if you have a clothes dryer.
- You can also identify the primary fuel you use for cooking (e.g. gas stove, electric stove).



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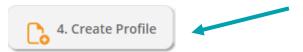


If you have solar on your property and it did not automatically appear, you can edit this section and select yes to fill in the details. You will need the following information:

- Directions the panels face
- If any shade covers the surface
- Capacity (or maximum generation the system can produce) (kW)
- If the panels are owned or leased
- When the system was installed
- If there is battery storage

#### Step 4: Create your Vermont Home Energy Profile

After you have updated your home features, click the "Create VT Profile" button to generate your Vermont Home Energy Profile. This button only appears after you have claimed your home.



You will be brought to a screen to review your home values. This provides a chance to look over all the details you updated and the opportunity to go back and edit home features, or to create the Vermont Home Energy Profile. At the bottom of the page, you will be prompted with two boxes.

The **first box must be checked to generate the VHEP** and ensure the information provided is correct to the best of your knowledge on the date the profile is created. The **second box** asks if you would like to make the profile accessible for use by home buyers and real estate professionals – if yes, leave the box unchecked. If you would like to keep the VHEP and its contents private, check the second box.

	Required: The information provided is correct to the best of my knowledge on the date the Vermont Home Energy Profile is created.	
	The Profile can be a valuable resource for interested homeowners and real estate professionals interested in understanding the energy features of a home. If you would like to make the Profile accessible for use by home buyers and real estate professionals leave this box <b>unchecked</b> . If you would like to keep the Vermont Home Energy Profile and its contents private and not publicly available, check this box	
If third prequest	arty, I am completing this Profile on behalf of/per the of:	
	ts? Comments are optional but will be included as a page of the Vermont Home Energy Profile	
		4
	Submit	



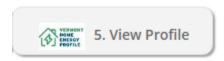
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If you are a third party completing the VHEP, please provide the name of the person you are completing the profile on behalf of.

If you would like to add clarifying comments about certain elements of your home, you may do so in a comment box at this step.

 Click "Submit". The tab now has a live link to create the Vermont Home Energy Profile as a PDF document.

You have now completed your Vermont Home Energy Profile!



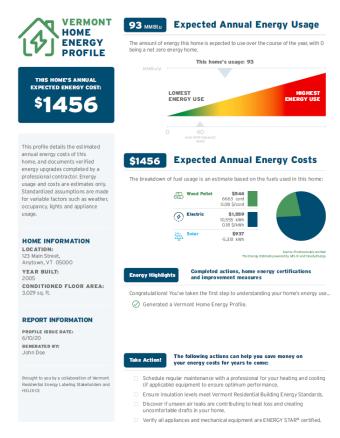
The Vermont Home Energy Profile will be used in your real estate transaction process to provide an estimate of annual costs for operating this home. The VHEP also documents the following:

- Energy consumption and cost estimates
- Energy upgrades completed or certifications received when applicable
- Recommended energy saving actions
- Resources for additional energy savings opportunities, rebates and financing

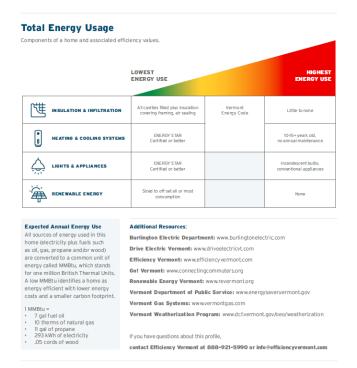
The Vermont Home Energy Profile is a collaboration of Vermont Residential Labeling Stakeholders and The Energy Estimator, powered by HELIX and ClearlyEnergy. If you need technical support, submit a request through the tool. If you have any questions about the Profile, please contact Efficiency Vermont at 888-921-5990. Any specific questions about the Montpelier Home Energy Information Ordinance, please contact the Jasmine Benson at <a href="mailto:jbenson@montepelier-vt.org">jbenson@montepelier-vt.org</a>. See the frequently asked questions section at the end of this document for more information.



#### Figure 1 Front Page of VHEP



#### Figure 2 Back Page of VHEP



#### Home Energy Labeling Information eXchange (HELIX) Energy Estimate

HELIX, sponsored by the Northeast Energy Efficiency Partnership, hosts third-party certified home energy data to be used by realtors and lenders to properly value energy efficiency, www.neep.org/home-energy-labeling-information-exchange-helix.

Clearly Energy generates energy estimates based on homeowner inputs and publicly-available data (home age, size, heating system type and fuel) or an energy model from a professional who has visited the home. Standard assumptions are used for variable factors such as weather and occupancy. Average fuel prices are obtained from the U.S. Energy information Administration and the VT Public Service Dept. Historic fuel bills can inform costs but are specific to prior occupancy and weather. www.clearlyeeretyc.com.

Figure 3 Comment Page of VHEP



CONDITIONED FLOOR AREA:



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# Montpelier Home Energy Information Ordinance Frequently Asked Questions (FAQ)

#### How does Montpelier's Home Energy Information Ordinance work?

Starting in May 2021, Montpelier residents are encouraged to generate and file a Vermont Home Energy Profile when listing properties for sale. Residents can create a Vermont Home Energy Profile (VHEP) in three simple steps. A certification sheet showing that a VHEP has been generated and shared with the buyer will be required at the point of sale along with other transactional documents. The ordinance will require VHEPs to be included in all residential listings as of July 1, 2022.

#### Why is the City of Montpelier requiring this?

The energy performance of a home should be known before the home is purchased. The purpose of this ordinance is to provide information to homebuyers about residential building energy performance. This information is designed to protect consumers, to enable more knowledgeable decisions about the full costs of operating homes and to motivate investments in home improvements that lower energy bills, reduce carbon emissions, increase comfort, safety and health for homeowners, and provide information to the City of Montpelier useful for reaching their Net Zero Energy goal.

- **Homeowners** can identify energy- and cost-saving recommendations for home improvements, and receive a better valuation of existing energy efficiency features and improvements in the real estate market when selling their home.
- **Prospective homebuyers** will gain more information about the operational costs of owning the houses under their consideration and receive a better valuation of existing energy efficiency features and improvements. This information can also be used in negotiating a mortgage rate.
- Real estate professionals will be better informed on how energy efficient a home is, enabling them to more confidently market energy efficiency features.

VHEP provides more transparency to homeowners, prospective buyers, and real estate professionals on the estimated energy use and costs of a home. This is similar to getting the miles per gallon (MPG) when looking at different cars in the market.

#### Does this ordinance apply to "for sale by owner" homes?

Yes. The homeowner is responsible for ensuring the Vermont Home Energy Profile (VHEP) is included in any online listings and at open houses hosted by the owner. All required listings include any printed advertisement, internet posting, or publicly displayed sign, including but not limited to NEREN MLS, Picket Fence Preview, Redfin, Zillow, Trulia and other third-party listing services. The only exemptions will be made for a building sold through a foreclosure, trustee, deed-in-lieu, or any pre-foreclosure sale.



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#### Why is this mandatory for Montpelier sellers?

Emissions from residential buildings make up a considerable portion of Montpelier's greenhouse gas profile and some residents struggle with home energy affordability and data accessibility. Montpelier is pursuing a mandatory policy in support of local and state goals because analysis of existing policies shows that voluntary approaches don't generate significant results.

#### What is included in the Vermont Home Energy Profile (VHEP)?

The VHEP includes the estimated energy cost per year as well as the estimated energy use broken down by fuel type. The profile will also acknowledge any green certifications or home energy labels that are associated with the home. Recommendations for next steps after generating the VHEP are listed in the VHEP. There is also information on how to contact Efficiency Vermont to follow up with an in-person audit or to learn about local rebates and incentives for energy efficiency improvements.

#### What if someone lies on the form?

To ensure accountability, the name of the person who fills out the information for the VHEP is included in the report. In addition, the person claiming a home agrees to the following:

- They are the utility account holder or have the authority to act on behalf of the account holder.
- They will not knowingly provide incorrect information.
- They will comply with the Terms of Use.

In addition, the homeowner signs off on the information included in a listing. If the buyer finds information that was intentionally misrepresented, they could take legal action against the seller. The Vermont Judicial Bureau will handle all legal complaints and appeals.

#### For how long is my home's profile valid?

Printed and electronic VHEP reports are valid for two (2) years from the assessment date to ensure the reports reflect current and accurate information since fuel prices change regularly. Following the expiration date, a Montpelier seller listing a home publicly for sale is required to have the Vermont Home Energy Profile reissued.

VHEP reports are void and invalid after an alteration or remodel of the home that affects the heated square footage, the quality and type of windows, insulation, HVAC equipment, or other changes that are reasonably expected to impact the Vermont Home Energy Profile and associated estimates of energy use. Other changes can include remodeling a basement or attic space. These changes require a new Vermont Home Energy Profile to be obtained prior to publicly listing the covered building for sale in Montpelier.



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#### Do I have to pay for a VHEP?

No, funding from Efficiency Vermont currently provides this tool for free for all Vermont homeowners.

#### Will I need an in-person energy assessment before I list my house for sale?

No, VHEP does not require an in-person assessment. Balancing affordability, accessibility, and accuracy, this tool is used to streamline the process to be as easy as possible for homeowners. VHEP is not intended to replace, but rather to complement in-home audits. VHEP can serve as a first step for a resident embarking on their energy journey or can be used to inform deep retrofit projects until an in-depth audit can be performed.

#### Am I required to create a Vermont Home Energy Profile for my home?

You are only required to create a VHEP if you are listing your home for sale in Montpelier. If you are not planning on selling your home, you are still encouraged to generate a VHEP for educational and financial planning purposes.

#### What do I do with my VHEP if I don't plan on selling my home?

Learning the energy performance and costs of your home allows for easier financial planning. The customized recommendations and resources on your VHEP provide an opportunity for you to pursue utility bill cost savings by implementing energy efficiency improvements.

#### How will my older home compare to a newly built home on VHEPs?

Older homes tend to be less efficient than new homes because of aging infrastructure and the advancement of building & energy codes, but energy efficiency upgrades can reduce energy usage and maintenance costs of old homes. VHEP provides a baseline of where high performing and average homes might fall on a scale to allow for easy comparison. If your home is old and has high energy usage, VHEP will provide custom recommendations for improvements.

#### What if I can only guess at the answers to some of the questions VHEP asks?

VHEP is intended to provide an "apples-to-apples" estimate for comparative and educational purposes. It does not require 100% accuracy for all data inputs and for most fields (except the utility data section), a "good faith" guess is acceptable.

## What if I anticipate gifting or otherwise bequeathing my property to a relative who does not know the history of my home's energy system and they will not know how to complete the tool?

The new homeowner should have access to documentation or to the home features in order to fill out enough fields on the VHEP tool to generate estimated energy usage and cost information. The more fields filled out, the more accurate the estimate becomes. There are a variety of resources available for learning how to use the tool. Alternatively, the new homeowner could employ the skills of an energy professional to evaluate the home.



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## What if I prefer a more detailed in-home audit rather than the virtual estimate? What if I already have a home energy rating like DOE's Home Energy Score or RESNET's HERS?

When available, data from previous on-site assessments or certifications are included in the profile. All Montpelier residents are required to generate and display a VHEP when listing their home for sale in order to provide an "apples-to-apples" comparison. Homeowners interested in a deeper assessment are encouraged to engage a contractor to conduct an HES, and those planning to build a new home are encouraged to explore HERS. The differences between these labels, and various others, make comparing homes with different ratings difficult and confusing. VHEP aims to combine all available information about the elements of the home and present it in a clear and visual format that focuses on energy performance, cost, and potential improvements.

#### What if my estimated annual energy cost is not what I expected it to be?

The estimated energy cost is an asset-based score. An asset-based score considers the physical assets of a home such as the existing insulation levels, HVAC systems, and hot water systems. Based on these assets and standard weather and occupant assumptions, the Vermont Home Energy Profile estimates annual energy usage and associated costs. This estimated cost may be different than your actual energy bills, which are based on your particular energy consumption behavior (e.g. thermostat settings, number of occupants, weather, etc.). Sellers generating a VHEP can add written comments in a comment box in the profile to clarify any anomalies.

#### What if I have a high estimated energy cost?

By including the VHEP in the listing, prospective buyers can make better informed decisions, but having a higher estimated cost of operation does not necessarily mean buyers will be deterred from your home. Studies around the country have shown that homes that provide standardized energy information, like VHEP, sell faster than homes without this information.<sup>3</sup> Homebuyers like having energy information, similar to having MPG information when buying a car. In addition, providing energy information with recommendations influences new homeowners' decisions about energy renovations, which will ultimately help improve the quality of housing stock of Montpelier. If you'd like to take action to reduce your energy costs, there are a variety of options. Your VHEP provides several custom recommendations to improve your home's energy performance and reduce utility costs. Examples of actions you can take include using Efficiency Vermont's rebates and incentives to upgrade appliances or equipment or contacting an energy professional to make weatherization improvements.

#### What if I think the estimate generated by VHEP is not an accurate representation of my home?

Adding utility bill information should help the model to create an accurate estimate. Users may also add a comment as an addendum to the profile as an explanation. Users are encouraged to ask questions and report suspected issues via the contact form available at each step of the tool.

<sup>&</sup>lt;sup>3</sup> https://www.tias.edu/en/knowledgeareas/area/real-estate/article/homes-with-an-energy-label-sold-100-days-faster



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#### What does ClearlyEnergy do with my data? Will it be sold?

None of your data will be sold. The data pulled into VHEP are publicly accessible and are supplemented only with inputs from the homeowner. Any edited features by the homeowner are stored within the VHEP account, but are not shared. With homeowner consent, VHEP shares the labels with the HELIX database, which can in turn share the labels with parties such as real estate professionals through multiple listing services, which are subject to privacy restrictions.

#### Where did the funds to develop the VHEP tool come from?

Supplemented by funds from Efficiency Vermont, Burlington Electric Department and Vermont Gas, the regional nonprofit Northeast Energy Efficiency Partnerships (NEEP) has funded, through support from foundations and the US Department of Energy, the development of the Vermont Home Energy Profile. No city funds were spent on the development of the tool or label. Working group participation was, and remains, a voluntary effort.

#### Who determined what kind of label would be used?

The Vermont Energy Labeling Working Group and the Montpelier Energy Efficiency Working Group, consisting of state and city officials, nonprofit organizations, technical partners, and industry experts led the collaborative development of this tool and label. Throughout the multi-year process, the groups solicited public feedback on the tool and label and tested variations of each with a focus group.

#### Who developed or who owns the Vermont Home Energy Profile?

The Vermont Home Energy Profile is the result of a collaborative effort between the nonprofit Northeast Energy Efficiency Partnerships (NEEP) and numerous Vermont partners including: Building Performance Professionals Association, Burlington Electric Department, Efficiency Vermont, Vermont Association of Realtors®, Vermont Builders and Remodelers Association, Vermont Department of Public Service, Vermont Housing and Conservation Board, Vermont Office of Economic Opportunity, and VGS. The automated energy model (AEM+) used by VHEP is co-owned by NEEP and ClearlyEnergy.

#### Who was involved in the VHEP development process?

In addition to the organizations involved in the collaborative development effort, VHEP has been continually tested by residents and developers have implemented select upgrades based on consumer feedback.

#### Why should I trust the VHEP methodology?

VHEP has been developed and tested through a multiyear process involving various stakeholders, including a focus group of residents. The automated energy model behind VHEP has been studied and found to be comparable to other industry accepted energy usage and cost estimation models. Learn more <a href="mailto:clearlyenergy.com/api-model-testing">clearlyenergy.com/api-model-testing</a> and <a href="mailto:neep.org/Vermont-labeling">neep.org/Vermont-labeling</a>.



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#### What about the variability of energy prices?

The VHEP captures the estimated energy costs at the time the report is generated. It is true that energy prices may vary and the actual cost of energy may differ slightly from the estimated costs. It is recommended to generate a new VHEP when home upgrades or other factors impact the energy performance of the home.

#### What if I need help completing my VHEP?

You can use <u>this Home Energy Information Guide</u> for step-by-step instructions for creating your VHEP, or <u>watch</u> <u>this short video that</u> summarizes the instructions.

People are ready to support you if you are still having trouble after completing the steps above. If you live in Montpelier, please reach out to Jasmine Benson at the City for assistance at <a href="mailto:jbenson@montpelier-vt.org">jbenson@montpelier-vt.org</a>. If you live outside of Montpelier, please use the contact form in the tool to submit questions to the technical developer or email Emmeline Luck at NEEP at <a href="mailto:jbenson@montpelier-vt.org">jbenson@montpelier-vt.org</a>.

#### Are there resources available to help me lower my estimated energy cost for my home?

Yes! Efficiency Vermont has several resources available to help Montpelier residents complete home energy improvements. In fact, your profile will provide recommended next steps for improving the efficiency of your home, including contacting Efficiency Vermont. Consider checking out Efficiency Vermont's <a href="Home Performance">Home Performance</a> with ENERGY STAR program.

#### After creating my VHEP, how do I use available programs and incentives to support energy improvements?

Contact <u>Efficiency Vermont</u> at 888-921-5990 to learn more about available programs, resources, rebates, and incentives. Depending on your needs, they can also connect you with other partners to support you in making energy improvements.

#### After creating my VHEP, what do I do with it?

If you are selling your home and you live outside the City of Montpelier, you are encouraged, but not required, to display your VHEP with your property listing. You can ask your real estate agent or email Emmeline Luck at <a href="mailto:eluck@neep.org">eluck@neep.org</a> for help doing so. If you live in Montpelier, please reach out to Jasmine Benson at the City for assistance at <a href="mailto:jbenson@montpelier-vt.org">jbenson@montpelier-vt.org</a>.

#### How do I know if a home listed for sale has generated a VHEP? How do I find it?

Sellers in Montpelier are required to disclose a VHEP to all prospective buyers. If one is not readily available, you may request the homeowner or the real estate agent to complete and display a VHEP. If the homeowner fails to comply, there will be no penalties assessed unless the property is listed for sale after July 1, 2022.



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## What if I want to see a VHEP for a listed home that I am interested in and the owners have not made one available?

You may request the homeowner or the real estate agent to complete and display a VHEP. Prior to July 1, 2022, sellers will not be penalized for declining to provide this information. The Vermont Judicial Bureau will handle all legal complaints and appeals.

#### What is an automated energy model (AEM) or AEM+?

AEMs generate an automated home energy baseline without any manual entry. These tools solely utilize preexisting data from real estate listings or tax assessor documents, energy certifications, and solar PV information. The data sources provide 6-8 home characteristics, including age, size, primary heating fuel, foundation type, number of bedrooms, and whether or not air conditioning is present. An AEM uses these characteristics to model how the home uses energy. AEMs require minimal time commitment and are easy to use. The automated energy model (AEM+) used by VHEP is co-owned by NEEP and ClearlyEnergy. AEM+ approaches improve on the accuracy of AEMs by including additional parameters. Homeowners or an authorized agent may manually add information regarding heating, cooling, and water heating appliances, attic and basement type, insulation levels, lighting, and utility bills. These details help create a better picture of how the home uses energy. Despite requiring greater homeowner buy-in, AEM+ tools provide a more complete model of the home while still offering a more efficient process than an in-home audit.

#### For a home with solar PV, does the PV reduce the MMBtu number?

No, because VHEP aims to provide comparable metrics. If the solar system is owned, it will show up on the breakdown of fuel usage diagram as well as in the Achievements section. If it is third-party owned, then it only appears in the Achievements section as a leased system which may not transfer with the sale of a house. The owned system impacts the estimated total energy cost for the year.

#### What if I have community solar or pay an optional green charge through my utility?

If cost units don't accurately represent your energy, you are able to add utility data in natural units. If the label generated still does not seem to accurately represent your home, users may add a comment as an addendum to the profile as an explanation. Users are encouraged to ask questions and report suspected issues via the contact form available at each step of the tool.

## How does the model account for different modes of heating and cooling used in the same house? How do you standardize the units of measure?

Under the heating section of the tool, there is a question that asks if the homeowner has a secondary heating system and what type of fuel. If they are used equally, the profile defaults to the automated system because this metric is homeowner dependent, as everyone uses fuel differently. The profile will state the primary fuel and how back-up heating sources may alter costs.



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#### What available evidence indicates that home energy information programs and/or policies are effective?

The National Association of Realtors released a <u>REALTORS®</u> and <u>Sustainability Report</u> in 2020 after surveying its members on sustainability issues facing the real estate industry. Some key highlights from the report include:

- 71% of agents said that energy efficiency promotion in listings was very or somewhat valuable
- 61% of agents report that consumers are somewhat interested and very interested in energy efficiency
- 42% of respondents reported that their MLS has green data fields, compared to 14% who did not
- Fields were used to promote green features (39%), energy data (27%), and certifications (15%)
- A comfortable living space (66%) and operating costs (25%) were among the most valued for clients

The U.S. DOE Better Buildings program created an <a href="Energy Efficiency for Real Estate Presentation">Energy Efficiency for Real Estate Presentation</a> which includes information from a variety of studies and reports. Studies conducted across the United States show a sales premium of: 2% to 6% for designated energy efficient homes, \$2.99 to \$13.82 per square foot for every dollar saved on annual electric bills, \$3,416 to \$8,882 per square foot for designated energy efficient homes. Energy efficient homes sold 18 to 89 days faster than comparable homes.

What available evidence indicates that home energy information programs and/or policies are effective?

#### **Additional Information:**

DOE's Bringing Home Energy Information to Real Estate: A Toolkit

National Association of State Energy Officials EMPRESS

Moving the Market: Energy Cost Disclosure in Residential Real Estate Listings

Home Energy Ratings in Real Estate Listings Would Steer Buyers to Efficient Choices

From Data to Decision: Green Data Making its Mark in the Real Estate Market

What is Green Worth? Unveiling High-Performance Home Premiums in Washington D.C.