



TOWN OF WEATHERSFIELD

LAND USE ADMINISTRATOR'S OFFICE

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Planning Commission **NOTICE OF PUBLIC HEARING**

Martin Memorial Hall – 5259 Route 5, Ascutney, Vermont 05030

Remote option – Zoom details below

Monday, February 13, 2023 – 7:00 PM

A public hearing before the Weathersfield Planning Commission will be held at the Town Office in Ascutney on Monday, February 13, 2023, at 7:00 PM to consider the following Town Plan amendment:

1. Chapter 7. – Energy

Statement of Purpose

The Weathersfield Planning Commission is proposing amendments to the above listed chapter in the 2017-Weathersfield Town Plan. The amendments proposed address issues concerning the protection of the Town's natural, scenic, and historic resources, while balancing the desire for greater independence and sustainability of local energy generation.

Geographic Areas Affected

The entire Town of Weathersfield is affected by this amendment.

Sections Headings

Chapter 7. – Energy

Persons wishing to be heard may do so in person, via Zoom, be represented by an agent, or may file written comments with the Planning Commission prior to the hearing.

Due to public demand and COVID-19; the Town has changed its public meeting platform from GoToMeeting to Zoom. For computer access, please go to this website, where you will find instructions and links to the meeting:

<https://www.weathersfieldvt.org/home/news/public-meetings-zoom>

To join any public meeting via phone, dial (929) 205-6099. When prompted, enter meeting ID 542-595-4364. You will not have a participant ID. Please press # when prompted to skip this section. The passcode for all meetings is 8021.

Planning Commission Reporting Form for Municipal Plan Amendments

This report is in accordance with 24 V.S.A. §4384(c) which states:

“When considering an amendment to a plan, the planning commission shall prepare a written report on the proposal. The report shall address the extent to which the plan, as amended, is consistent with the goals established in §4302 of this title.

If the proposal would alter the designation of any land area, the report should cover the following points:

- 1. The probable impact on the surrounding area, including the effect of any resulting increase in traffic, and the probable impact on the overall pattern of land use.*

The proposed amendments do not alter the designation of any land area. The proposed amendments address concerns related to protection of the Town’s natural, scenic, and historic resources by establishing energy policies and facility siting standards and criteria. The amendments are proposed to encourage the traditional Vermont land use pattern of mixed-use villages and concentrated development surrounded by rural lands in between.

- 2. The long-term cost or benefit to the municipality, based upon consideration of the probable impact on:*
 - (A) the municipal tax base; and*

The proposed amendments support the development of renewable energy generation facilities while protecting the values of private lands and scenic areas. Balancing these resources will have a beneficial effect on the municipal tax base by allowing for appropriate economic development without spoiling the resources that add value to the Town and State.

- (B) the need for public facilities;*

The proposed amendments are not expected to significantly impact the need for public facilities and services. The amendments are not expected to affect the rate of population growth nor the complexity of administering the current municipal services.

- 3. The amount of vacant land which is:*
 - (A) already subject to the proposed new designation; and*

The proposed amendments would not affect land that is already designated for energy generation facilities.

- (B) actually available for that purpose, and the need for additional land for that purpose.*

The proposed amendments would affect certain vacant land pursuing the establishment of energy generation facilities. The amendment is designed to guide the Public Utilities Commission in their review of energy generation facilities. The proposed amendments identify conditions where such facilities are not in compliance with the broader Town Plan.

4. *The suitability of the area in question for the proposed purpose, after consideration of:*
(A) *appropriate alternative locations;*

The proposed amendments do not identify appropriate locations for energy generation facilities. The amendments identify circumstances, resources, and values that must be considered when granting approval for energy generation facilities.

- (B) *alternative uses for the area under consideration; and*

The proposed amendments do identify alternative land uses that must be considered when granting approval for energy facilities. Specifically, intact forests, active agricultural land, scenic vistas, and other significant natural resources are valued alternative uses to energy generation facilities. However, due to the impermanent nature of renewable energy facilities (specifically solar) conversion to such use is not seen as detrimental to these alternative uses when applied in appropriate locations.

- (C) *the probable impact of the proposed change on other areas similarly designated*

Areas adjacent to energy generation facilities are subject to the greatest impacts. Whether adjoining lands are used for things like public roads or private residences, the proposed amendments attempt to protect the Town and its residents from undue adverse impacts from energy generation facilities while allowing appropriate development of such facilities in balance to meet the local and broader energy needs and desires.

5. *The appropriateness of the size and boundaries of the area proposed for change, with respect to the area required for the proposed use, land capability and existing development in the area.”*

The proposed amendments necessarily apply to the whole town. No specific areas are proposed for a change in land use designation. Rather, a series of conditions and standards have been outlined for review on a case-by-case basis.

Please Note:

- ❖ The planning commission must hold at least one public hearing within the municipality after public notice on any proposed plan or amendment.
- ❖ At least **30** days prior to the first hearing, a copy of the proposed plan or amendment and the written report must be delivered with proof of the receipt, or mailed by certified mail, return receipt requested, to each of the following:
 1. the chairperson of the planning commission of each abutting municipality, or in the absence of any planning commission in an abutting municipality, to the clerk of that municipality;
 2. the executive director of the regional planning commission of the area in which the municipality is located;

3. the Department of Economics, Housing and Community Development within the Agency of Commerce and Community Development; and
 4. business, conservation, low income advocacy and other community or interest groups or organizations that have requested notice in writing prior to the date the hearing is warned.
- ❖ The planning commission may make revisions to the proposed plan or amendment and to any written report, and must thereafter submit the proposed plan or amendment and any written report to the legislative body of the municipality.
 - ❖ If the legislative body changes any part of the proposed plan, the planning commission must submit to the legislative body, at or prior to the public hearing, a report that analyzes the extent to which the changed proposal, when taken together with the rest of the plan, is consistent with the legislative goals established in 24 V.S.A. §4302.
 - ❖ Simultaneously with the submission, the planning commission must file with the clerk of the municipality a copy of the proposed plan or amendment, and any written report, for public review.

ENERGY

7.1 Introduction

We all use energy in many forms to conduct our daily lives. That energy may come from local sources or be imported from outside the town. Either source may be renewable or non-renewable. Renewable energy comes from sources that are naturally replenished and include biomass (wood, corn, grasses, and vegetable oil), the sun (solar), wind, the earth (geothermal), water (hydro), or manure (methane digesters - “cow power”). Non-renewable energy is produced from sources that cannot be renewed by human activity or within the human time scale. These include oil, natural gas, uranium, and coal.

Weathersfield is heavily dependent upon imported, non-renewable sources to meet its energy needs. This chapter provides an analysis of our energy resources and needs, as well as energy scarcity, conservation, costs, and problems in our community.

7.1.1 This plan seeks to:

- 7.1.1.1 Help the town identify ways to conserve energy,
- 7.1.1.2 Encourage renewable or lower-emission energy sources for electricity, heat and transportation,
- 7.1.1.3 Encourage a pattern of development that likely results in the conservation of energy,
- 7.1.1.4 Encourage development of appropriately scaled renewable energy resources,
- 7.1.1.5 Reduce greenhouse gas emissions, and
- 7.1.1.6 Reduce transportation energy demand and single-occupant vehicle use.

7.2 Analysis of Renewable Energy Resources in Weathersfield

Weathersfield has significant potential to generate additional renewable energy from biomass, geothermal, hydro, solar, and wind sources.

7.2.1 Biomass: The term “biomass” includes bio-diesel, perennial grasses, methane digesters, waste to energy, firewood, and woody biomass.

7.2.1.1 *Bio-diesel*: Bio-diesel is a type of fuel made from vegetable oils, animal fats, or waste cooking oil. It may be used in its purest form or combined with petroleum diesel. It is biodegradable, nontoxic, far less polluting than fossil fuels and may be used in ordinary diesel engines with little or no modification. Bio-diesel may also be produced from waste cooking oil. There are several restaurants in Weathersfield that could provide small amounts of waste

cooking oil for conversion to bio-diesel. Any biodiesel use in Weathersfield is by private users; no figures are readily available.

7.2.1.2 *Vegetable oils:* Vegetable oils are derived from oilseed crops such as mustard, rapeseed, or sunflowers. There are no oilseed crops being produced in Weathersfield nor are there the facilities within a reasonable distance to convert the seeds to bio-diesel.

7.2.1.3. *Woody Biomass:* Wood is used in a variety of forms to provide heat or to generate electricity. In the simplest form, wood from trees is split and sold for firewood for wood- burning stoves and furnaces in home heating. The Weathersfield School uses wood chips to heat the school. Wood pellets are also a popular way to provide home heating.

Studies show that burning woody biomass to generate heat is far more efficient than burning it to generate electricity. Additional challenges to using woody biomass for energy production on a large scale are truck traffic (large logging trucks), waste heat (if the biomass is used for electricity production), and carbon dioxide emissions.

7.2.1.4. *Perennial Grasses:* There are problems associated with the burning of perennial grasses that must be taken into consideration when considering this fuel source. No perennial grasses are currently being grown in Weathersfield for energy use.

7.2.1.5. *Methane Digesters:* According to Green Mountain Power (GMP), Cow Power, “one cow can produce about 30 gallons of manure a day which, in turn, can generate enough electricity to power two 100-watt incandescent light bulbs for 24 hours. The waste from 4-6 cows will generate about 1 kw of electricity” (VT Renewable Energy Atlas). Weathersfield has a number of various types of livestock in town, but no working dairy farms. There are currently no methane digesters in town.

7.2.2 Geothermal: Geothermal, or ground source heating, is the direct use of energy absorbed from the sun at the earth’s surface, and supplemented from the earth’s core. Modern geothermal heating and cooling systems rely on the stable temperature of the earth (55 degrees Fahrenheit), or groundwater in a well, along with an electric heat pump. This technology is not currently financially feasible in Weathersfield.

7.2.3 Hydro: There are three potential sites in Weathersfield for hydroelectric power - Stoughton Pond, Springfield Reservoir, and the Soapstone Dam on the Black River. The Vermont Energy Atlas estimates they have the potential to produce a total of 207 kW of power.

With the abundance of streams in Weathersfield, micro hydro-power (run-of-river) is another alternative that should be considered. Micro hydro-power generation requires as little as two gallons per minute of stream flow and does not require the usual reservoir associated with standard hydro-power projects. Peak power production is in the winter when electricity demands are high. Installation costs and maintenance fees are relatively small in comparison to other technologies.

7.2.4 Solar: Solar energy may be used to generate electricity or thermal heat. It may be stored on-site using batteries or sent to the grid via net-metering. Solar hot water does not require batteries or net-metering. There are an increasing number of net-metering sites in Weathersfield.

7.2.5 Wind: State wind resource data was analyzed and it shows only limited potential for utility-scale (70 meters or 230 feet tall at the hub) or commercial-scale (50 meters or 164 feet tall) wind power in town. Residential-scale (30 meters or 98 feet tall) wind appears to be the only reasonable option given prevailing wind speeds, land ownership, and proximity to three phase power lines.

7.2.6 Summary of Renewable Resources: In summary, it appears that there are several ways that Weathersfield residents and the town government could reduce their non-renewable, imported energy dependencies through the development and use of locally produced, renewable energy fuels.

7.2.7 All development of renewable energy in Weathersfield should be consistent with land use, conservation, and other goals described elsewhere in this plan.

7.3 Analysis of Non-Renewable Energy Resources in Weathersfield

Fuel oil and propane for home heating, cooking, and hot water are delivered to Weathersfield residents from commercial sources outside the Town. The only reserves for home heating fuel in the Town are the storage tanks on municipal and private properties.

Transportation is fueled primarily with gasoline or diesel fuel that is likewise imported to the Town by various distributors in the area. The only storage facilities in Town for any of these energy resources are the gasoline storage tanks at the gas stations in Town, the storage tanks at the Town Highway Garage, and some at commercial and residential locations.

Electricity is brought to the majority of Weathersfield homes and businesses via the “grid.” The electricity traveling in the grid is produced from both renewable and non-renewable sources. The Town is crisscrossed by numerous distribution and transmission lines belonging to both Vermont Electric Power Company (VELCO) and GMP. The substation in

Ascutney was upgraded to a newer design that will be more reliable than the previous design.

7.4 Analysis of Energy Scarcity and Needs in Weathersfield

7.4.1 Scarcity

Weathersfield does not have any local sources of non-renewable energy. The scarcity or abundance of non-renewable sources is entirely dependent on factors beyond the town.

Weathersfield has a variety of local sources of renewable energy, as discussed in detail in Section 1.2 above. The potential of renewable energy at each specific site will depend on site conditions (e.g. solar access). Factors, such as droughts, may limit micro-hydro opportunities.

7.4.2 Needs

Weathersfield residents, like many Vermonters, are highly dependent on non-renewable energy, although each year residents and business owners invest in more renewable systems. Many are encouraged to do so with existing incentives through Efficiency Vermont or Green Mountain Power. Additional incentives are needed to encourage more residents to invest in energy efficiency improvements and renewable energy systems, especially for retirees and lower-income residents.

7.5 Analysis of Energy Costs in Weathersfield

To provide a complete or accurate analysis of energy costs, the Town must establish a baseline of energy costs from municipal buildings, vehicles, and operations and diligently maintain the database to determine where energy costs may be stabilized or reduced.

Cost savings may be realized from:

7.5.1 Weatherization of buildings

7.5.2 Energy efficient lighting

7.5.3 Heating and air conditioning changes to more efficient

7.5.4 mechanisms, such as air-source cold climate heat pumps

7.5.5 Conservation measures (reduction in use)

7.5.6 Fuel-efficient vehicles

7.5.7 Analysis of town vehicle operations

7.6 Analysis of Energy Problems in Weathersfield

The primary energy problems in Weathersfield are less efficient older homes and dependence on energy from outside the Town.

Problems could arise in the future as a result of energy projects, such as funding for decommissioning of solar projects. The Town should promote future energy projects, but also the carefully review the current and potential impacts of energy projects on costs, aesthetics, natural resources, and the environment.

There are specific areas where the Town’s residents would not like to see overhead transmission lines or energy projects (other than roof-mounted solar) that have an undue adverse impact on important scenic resources. They are listed in the Scenic Resources section in the Town Plan.

7.7 Energy Goals

7.7.1 To make efficient use of energy, provide for the development of renewable energy resources, encourage weatherization, reduce emissions of greenhouse gases, prioritize energy efficient forms of transportation, and promote land use policies that are likely to result in energy conservation

7.8 Energy Policies

7.8.1 Weathersfield has limited potential for utility-scale wind energy development, as areas with sufficient access to consistent wind are generally small in size and more than a mile away from three-phase power lines. The prime wind sites (e.g. Weathersfield Center, Butterfield Hill, Pikes Peak) are relatively close to established residences and/or specifically identified scenic, historic or natural resources in the Town Plan and/or Biologic Natural Areas of Weathersfield. The secondary wind sites (e.g. Skyline Drive, Hawks Mountain, Little Ascutney, Pierson Peak, Mount Ascutney) are largely in scenic or natural resources areas also specifically identified in the Town Plan and/or Biologic Natural Areas of Weathersfield. Development in these areas would have a profoundly negative impact on critical viewsheds throughout the community, as the natural profile of the mountain forms an iconic backdrop from both in-town and rural valley locations. Because no other locations in Weathersfield have suitable wind resource, infrastructure availability, or are free from significant environmental constraints (Figure 6), no utility-scale (100 KW capacity or greater) wind energy facilities should be located in the town. Smaller scale wind projects, including residential-scale

turbines (generally less than 10 KW) and turbines installed at farms, residences or small businesses, up to 100 KW, are encouraged as long as noise from the turbines does not adversely affect neighboring residential properties and as long as they are not prominently visible from any town-identified historic district.

- 7.8.2 The Town particularly encourages solar energy development, of any scale, on building rooftops as well as other types of renewables including methane digesters and micro-hydro.
- 7.8.3 The Town strongly supports the development of residential-scale (up to 15 KW capacity ground-mounted) electricity generation from solar energy at homes, businesses, schools, and other institutions.
- 7.8.4 The Town also supports solar projects (between 15 KW and 150KW in size) provided they are located on sites identified as having high potential for electricity generation based on solar resource availability and avoid “prohibited areas” as identified below. Moreover, any community solar project located on a site that is not a prohibited/exclusion area shall be considered as being located on a “preferred site” and eligible for all of the regulatory and financial incentives associated with larger scale solar energy installations pursuant to Public Utility Commission Rule 5.100 and 30 V.S.A. Section 248.
- 7.8.5 Any larger scale solar development (greater than 150 kW capacity) shall be subject to the following policies and standards.

7.8.6 Solar Electricity Facility Siting Standards

The term “solar facility” shall have the following meaning: a solar electricity generation and transmission facility with a 150kW (AC) or greater capacity, including all on-site and offsite improvements necessary for the development and operation, and on-going maintenance of the facility.

The Town of Weathersfield has developed standards for the development of solar facilities for reference and use by facility developers and local property owners and for consideration in Section 248 proceedings (30 VSA §248). These standards are set forth below.

7.8.7.1 Community Standards

The following community standards are to be considered in undertaking municipal solar electricity projects and programs, in updating Weathersfield’s Zoning Bylaws to address solar facilities subject to local regulation, and in the review of any new or upgraded solar facilities in excess of 15 kW capacity, by the Town of

Weathersfield and the Public Utility Commission (Section 248 review).

- a) **Plan Conformance:** New solar facilities and proposed system upgrades should be consistent with the Vermont Comprehensive Energy Plan, the Vermont Long-Range Transmission Plan, and utilities Integrated Resource Planning (IRP).
- b) **Benefits:** A demonstrated statewide public need that outweighs adverse impacts to local residents and resources must be documented for municipal support of new solar facilities located within or which may otherwise affect Weathersfield. Facility development must benefit Town of Weathersfield and State residents, businesses, and property owners in direct proportion to the impacts of the proposed development.
- c) **Impacts:** New solar facilities must be evaluated for consistency with community and regional development objectives and shall avoid undue adverse impacts to significant cultural, natural, and scenic resources and aesthetic values identified by the community in the Weathersfield Town Plan and the Scenic Resources Inventory. When evaluating impacts of a proposed solar facility under the criteria set forth in this Town Plan, the cumulative impact of existing solar facilities, approved pending solar facilities, and the proposed solar facility shall be considered. It is explicitly understood that a proposed solar facility which by itself may not have an adverse impact may be deemed to have an adverse impact when considered in light of the cumulative impacts of the proposed solar facility and existing solar facilities and pending already approved solar facilities.
- d) **Decommissioning:** All facility certificates shall specify conditions for system decommissioning, including required sureties (bonds) for facility removal and site restoration to a safe, useful, and environmentally stable condition. All hazardous materials and structures, including foundations, pads, and accessory structures must be removed from the site and safely disposed of in accordance with regulations and best practices current at the time of decommissioning.

7.8.7.2 Solar Facility Siting Criteria

Weathersfield supports development of solar energy generation facilities consistent with the policies and guidelines set forth in this plan. It recognizes that financial considerations require projects to be located in close proximity to electric power lines capable of distributing the load proposed to be generated and to have

convenient access from major transportation networks for construction. However, the Town desires to maintain the open landscape and scenic views important to Weathersfield's sense of place, tourism economy, and rural cultural aesthetic. Not all solar facilities proposed can meet this standard. Projects must meet the following criteria in order to be supported by this Town Plan:

- a) **Siting Requirements:** New solar facilities shall be sited in locations that do not adversely impact the community's traditional and planned patterns of growth of compact village centers surrounded by a rural countryside, including working farms and forest land. Solar facilities shall, therefore, not be sited in locations that adversely impact scenic views, roads, or other areas identified in the Scenic Resources Section of this Plan, nor shall solar facilities be sited in locations that adversely impact any of the following scenic attributes identified in the Plan including: views across open fields, especially when those fields form an important foreground; prominent ridgelines or hillsides that can be seen from many public vantage points and thus form a natural backdrop for many landscapes; historic buildings and districts and gateways to historic districts; and, scenes that include important contrasting elements such as water. The impact on prime and statewide agricultural soils shall be minimized during project design.
- b) **Preferred Areas:** The following areas are identified as preferred areas for solar facilities, and they must also meet the Town's Preferred Siting Checklist:
- Roof-mounted systems;
 - Parking lot canopies;
 - Systems located in proximity to existing large scale, commercial or industrial buildings;
 - Proximity to existing hedgerows or other topographical features that naturally screen the entire proposed array;
 - Reuse of former brownfields;
 - Facilities that are sited in previously disturbed areas, such as gravel pits, closed landfills, or former quarries;
- c) **Prohibited (Exclusion) Areas:** In addition to those areas that do not meet the siting requirements set forth above, development of solar generating facilities shall be excluded from (prohibited within), and shall not be supported by the Town, in the following locations:
- Floodways shown on Flood Insurance Rate Maps (FIRMs);
 - Class I or II wetlands;

- Riparian buffers and setbacks as defined in Weathersfield's Zoning Bylaws;
- Rare, threatened, or endangered species habitat or communities as mapped or identified through site investigation, and core habitat areas, migratory routes and travel corridors;
- Elevations of 1,500 feet in elevation or higher;
- Steep slopes (>25%);
- Habitat blocks of 500 acres or greater in size;
- A site in proximity to and interfering with a significant viewshed identified in the Scenic Resources sections of the Town Plan (see Section 7.6 and Section 5.3);
- A site that causes adverse impacts to historical or cultural resources, including state or federal designated historic districts, sites and structures, and locally significant cultural resources identified in the municipal plan. Prohibited impacts to historical and cultural resources include:
 - Removal or demolition;
 - Physical or structural damage, significant visual intrusion, or threat to the use;
 - Significant intrusion in a rural historic district or historic landscape with a high degree of integrity;
 - Significant visual intrusion into a hillside that serves as a backdrop to a historic site or structure;
 - Creating a focal point that would disrupt or distract from elements of a historic landscape;
 - A significant intrusion in a rural historic district or historic landscape that has a high degree of integrity;
 - Impairing a vista or viewshed from a historic resource that is a significant component of its historic character and history of use;
 - Visually overwhelming a historic setting, such as by being dramatically out of scale;
 - Isolating a historic resource from its historic setting, or introducing incongruous or incompatible uses, or new visual, audible or atmospheric elements.

d) **Mass and Scale:** Except for projects located on preferred sites, solar facilities larger than 10 acres, individually or cumulatively, cannot be adequately screened or mitigated to blend into the municipality's landscape and are, therefore, explicitly prohibited.

- 7.8.8 Energy audits should be conducted prior to undertaking major improvements to Town-owned buildings, and the Town should invest in priority energy efficiency upgrades as called for in energy audit.
- 7.8.9 All applicable new and renovated buildings are subject to the Vermont Residential Building Energy Standards or Vermont Commercial Building Energy Standards.
- 7.8.10 The Town encourages other methods to exceed the state energy code, such as through passive solar building orientation to take advantage of heating from the sun, landscaping to shade buildings and reduce summer temperatures, or using the “Energy Star” building performance rating system.
- 7.8.11 The current land use pattern requires people to drive to work and other amenities; encourage new housing, businesses, and other amenities in walkable/centralized areas. The reduction of sprawl and low-density development not only reduces energy consumption, but also can improve the local and regional economy. Refer to Future Land Use Map.

7.9 Energy Recommendations

- 7.9.1 Consider adopting a freestanding solar screening bylaw under 24 V.S.A. §4414 (15).
- 7.9.2 The Town of Weathersfield may participate in the Public Utility Commission’s review of new and expanded generation facilities to ensure that local energy, resource conservation, and development objectives are identified and considered in proposed utility development. This may include joint participation and collaboration with other affected municipalities and the Mount Ascutney Regional Commission for projects that may have significant regional impact. It is acknowledged that the PUC’s primary focus is on administering state public policy and regulating actions that are directed at ensuring that utility services promote the general good of the state.
- 7.9.3 The Planning Commission, in consultation with the Select Board, should develop guidelines to direct local participation in Section 248 proceedings related to solar facilities located in Weathersfield or in neighboring communities which may affect the town. The guidelines should reflect levels of participation or formal intervention in relation to the type, location, scale, operation, and magnitude of a proposed project, and its potential benefits, detriments to, and impacts on the community.

- 7.9.4 Inform residents about Efficiency Excellence Network (EEN) contractors by providing links to EEN information through a municipal website or through other means.
- 7.9.5 Participating in the Safe Routes to School program will help reduce reliance on vehicle transport.
- 7.9.6 Inform residents and business owners about existing energy efficiency programs and incentives, especially weatherization services and financing options for low-to-moderate income household.
- 7.9.7 Appoint an Energy Coordinator or establish an Energy Committee to help implement recommendations in this Chapter.
- 7.9.8 Hold an information forum such as Button Up, and invite residents to speak about the energy improvements that they have made to their homes. Provide data that demonstrates why these improvements make sense for residents.
- 7.9.9 Assess the life cycle costs of potential energy improvements during design and construction planning. For example, investment in a new, efficient heating system may be more expensive up front, but more economical to operate over time.
- 7.9.10 Promote the use of cold climate heat pumps (aka air-source heat pumps, mini-splits or ductless heat pumps) as a highly efficient source of heat and air conditioning with education/presentations in coordination with the EEU's/electric utilities. These systems are a good option to retrofit existing houses, and can be used to supplement the existing heating system. They also provide air conditioning during the warmer months. Ground source (geothermal) heat pumps may also be suitable option. Heat pump water heaters are also an energy efficient option.
- 7.9.11 Promote the Go Vermont webpage, which provides rideshare, vanpool, public transit and park-and-ride options.
- 7.9.12 Seek grants and partnerships to fund the installation of electric vehicle charging infrastructure at the park and ride lot, school or other town-owned properties.
- 7.9.13 Coordinate with MARC and Local Motion to promote the planned electric-bicycle lending library to help promote e-bikes as a viable form of travel.
- 7.9.14 Continue to financially support The Moover public transportation services, such as the commuter bus that serves the I-91 Exit 8 park and ride lot, to provide access to jobs for residents and encourage less single-occupant vehicle use.

- 7.9.15 The Town should work with electric and utility contractors to assist homeowners with switching to alternative heating systems such as wood pellet stove and air source heat pumps. Woody biomass can be sourced locally.
- 7.9.16 If renewable energy systems are not practicable, encourage homeowners to replace old furnaces or boilers with a high-efficiency model.
- 7.9.17 Promote wood stove change-out programs that take older non-EPA certified stoves out of service and replace them with more efficient and lower emitting cordwood or pellet stove.

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