

Energy Planning Standards for Municipal Plans

Instructions

Before proceeding, please review the requirements of Parts I and II below, as well as the Overview document. Submitting a Municipal Plan for review under the standards below is entirely voluntary, as enabled under Act 174, the Energy Development Improvement Act of 2016. If a Municipal Plan meets the standards, it will be given an affirmative “determination of energy compliance,” and will be given “substantial deference” in the Public Service Board’s review of whether an energy project meets the orderly development criterion in the Section 248 process. Specifically, with respect to an in-state electric generation facility, the Board:

[S]hall give substantial deference to the land conservation measures and specific policies contained in a duly adopted regional and municipal plan that has received an affirmative determination of energy compliance under 24 V.S.A. § 4352. In this subdivision (C), “substantial deference” means that a land conservation measure or specific policy shall be applied in accordance with its terms unless there is a clear and convincing demonstration that other factors affecting the general good of the State outweigh the application of the measure or policy. The term shall not include consideration of whether the determination of energy compliance should or should not have been affirmative under 24 V.S.A. § 4352.

Municipal Plans should be submitted by the municipality’s legislative body to the Regional Planning Commission (RPC) if the Regional Plan has received an affirmative determination of energy compliance. If a Regional Plan has not received such a determination, until July 1, 2018¹, a municipality may submit its adopted and approved Municipal Plan to the Department of Public Service (DPS) for a determination of energy compliance (determination), along with the completed checklist below. After a Municipal Plan and completed checklist have been submitted to the RPC (or DPS), the RPC or DPS will schedule a public hearing noticed at least 15 days in advance by direct mail to the requesting municipal legislative body, on the RPC or DPS website, and in a newspaper of general publication in the municipality. The RPC or DPS shall issue a determination in writing within two months of the receipt of a request. If the determination is negative, the RPC or DPS shall state the reasons for the denial in writing and, if appropriate, suggest acceptable modifications. Submissions for a new determination following a negative determination shall receive a new determination within 45 days.

The plans that Municipalities submit must:

- Be adopted
- Be confirmed under 24 V.S.A. § 4350
- Include an energy element that has the same components as described in 24 V.S.A. § 4348a(a)(3)
- Be consistent with state energy policy (described below), in the manner described in 24 V.S.A. § 4302(f)(1)
- Meet all standards for issuing a determination of energy compliance (see below)

¹ These standards will be revised after July 1, 2018 to reflect that Municipal Plans should be submitted only to the Regional Planning Commissions – which will all have had an opportunity to seek a determination of energy compliance – from that point forward.

Municipalities are encouraged to consult with their reviewer (either their RPC or DPS) before undertaking the process of plan adoption, which may help in identifying any deficiencies or inconsistencies with the standards or other requirements that would be more difficult to remedy after a plan has gone through the formal adoption process.

The state’s Comprehensive Energy Plan (CEP) is revised on a 6-year basis. When the next CEP is published in 2022, it will include a revised set of standards, as well as Recommendations that are customized to regions and municipalities. The Recommendations that accompany this initial set of Standards represent a subset of recommendations from the 2016 CEP, which were not written with regions and municipalities specifically in mind. A Guidance document – which is expected to evolve as best practices from regions and municipalities emerge – will be published shortly after the Standards are issued. It will serve as the warehouse for relevant recommendations from the 2016 CEP, links to data sources, instructions on conducting analysis and mapping, and sample language/best practices. Once issued and until the 2022 CEP is published, this Guidance document will supplant the Recommendations document.

Affirmative determinations last for the life cycle of a revision of the Municipal Plan, and Municipal Plans that are submitted after the 2022 CEP is issued will be expected to meet the Standards that are issued at that time. Municipalities are encouraged to consult with their RPC or DPS regarding interim amendments that might affect any of the standards below, to discuss whether a new review is triggered.

If you wish to submit your Municipal Plan to your RPC or to DPS for a determination, please read closely the specific instructions at the start of each section below, and attach your Municipal Plan to this checklist.

Determination requests to an RPC (and any other questions) should be submitted to your RPC’s designated contact. Determination requests to DPS until July 1, 2018 – and only for municipalities whose Regions’ plans have not received an affirmative determination – should be submitted to:

PSD.PlanningStandards@vermont.gov.

Part I: Applicant Information	
The plan being submitted for review is a:	<input type="checkbox"/> Municipal Plan in a region whose regional plan has received an affirmative determination of energy compliance from the Commissioner of Public Service Please submit these plans to your RPC
	<input checked="" type="checkbox"/> Municipal Plan in a region whose regional plan has <u>not</u> received a determination of energy compliance Until July 1, 2018, please submit these to the DPS. After July 1, 2018, this option ceases to exist.
Applicant:	Town of New Haven
Contact person:	Cindy Hill, Town Attorney
Contact information:	802-989-6906 lawyerhill@yahoo.com
Received by: <small>Click here to enter text.</small>	Date: <small>Click here to enter text.</small>

Part II: Determination Standards Checklist

The checklist below will be used to evaluate your plan's consistency with statutory requirements under Act 174, including the requirement to be adopted and approved, contain an enhanced energy element, be consistent with state energy policy, and meet a set of standards designed to ensure consistency with state energy goals and policies.

Please review and attach your plan (or adopted energy element/plan, along with supporting documentation) and self-evaluate whether it contains the following components. Use the Notes column to briefly describe how your plan is consistent with the standard, including relevant page references (you may include additional pages to expand upon Notes). If you feel a standard is not relevant or attainable, please check N/A where it is available and use the Notes column to describe the situation, explaining why the standard is not relevant or attainable, and indicate what measures your municipality is taking instead to mitigate any adverse effects of not making substantial progress toward this standard. If N/A is not made available, the standard must be met (unless the instructions for that standard indicate otherwise) and checked "Yes" in order to receive an affirmative determination. There is no penalty for checking (or limit on the number of times you may check) N/A where it is available, as long as a reasonable justification is provided in the Notes column.

Plan Adoption Requirement

Act 174 requires that municipal plans be adopted and approved in order to qualify for a determination of energy compliance. In the near term, it is likely municipalities will revise and submit isolated energy plans or elements, particularly due to long planning cycles. Therefore, the plan adoption requirement can be met through an amendment to an existing plan in the form of an energy element or energy plan, as long as the amendment or plan itself is duly adopted as part of the municipal plan and incorporated by reference or appended to the underlying, full plan (i.e., is officially "in" the municipal plan), as well as approved for confirmation with the region. If this route is chosen, the municipality should also attach the planning commission report required for plan amendments under 24 V.S.A. § 4384, which should address the internal consistency of the energy plan/element with other related elements of the underlying plan (particularly Transportation and Land Use), and/or whether the energy plan/element supersedes language in those other elements. Standards 1 and 2 below must be answered in the affirmative in order for a plan to receive an affirmative determination of energy compliance.

<p>1. Has your plan been duly adopted and approved for confirmation according to <u>24 V.S.A. § 4350</u>?</p>	<p><input checked="" type="checkbox"/> Yes. Adoption date: 03-07-2017 Confirmation date: 05-10-17</p>	<p><input type="checkbox"/> No</p>	<p>This Town Plan was adopted at Town Meeting in March, 2017, and confirmed by the Addison County Regional Planning Commission.</p>
<p>2. Is a copy of the plan (or adopted energy element/plan, along with underlying plan and planning commission report addressing consistency of energy element/plan with other elements of underlying plan) attached to this checklist?</p>	<p><input checked="" type="checkbox"/> Yes</p>	<p><input type="checkbox"/> No</p>	<p>Notes: A .pdf of the plan is being emailed contemporaneously with this checklist.</p>

Energy Element Requirement

To obtain a determination of energy compliance, Act 174 requires municipalities to include an “energy element” that contains the same components described in 24 V.S.A. § 4348a(a)(3), which was revised through Act 174 to explicitly address energy across all sectors and to identify potential and unsuitable areas for siting renewable energy resources:

An energy element, which may include an analysis of resources, needs, scarcities, costs, and problems within the region across all energy sectors, including electric, thermal, and transportation; a statement of policy on the conservation and efficient use of energy and the development and siting of renewable energy resources; a statement of policy on patterns and densities of land use likely to result in conservation of energy; and an identification of potential areas for the development and siting of renewable energy resources and areas that are unsuitable for siting those resources or particular categories or sizes of those resources.

The standards below are generally organized to integrate each component of the enhanced energy element with related determination standards that evaluate the plan’s consistency with state goals and policies. **Energy element components are identified in bolded text.**

While municipalities may choose to primarily address energy used for heating, transportation, and electricity in the required energy element, they may also choose to address some of these components in related plan elements (e.g., Transportation and Land Use) and should indicate as much in the Notes column. To the extent an energy element is designed to comprehensively address energy, it should be complementary to and reference other relevant plan elements.

3. Does the plan contain an energy element, that contains the same components described in 24 V.S.A. § 4348a(a)(3)?
Individual components of the energy element will be evaluated through the standards below.

Yes

No

Page: 43 et seq.

Notes: The energy plan begins at p. 43. Land use and transportation elements are also addressed in their respective sections.

Consistency with State Goals and Policies Requirement

Act 174 states that regional and municipal plans must be consistent with the following state goals and policies:

- Greenhouse gas reduction goals under 10 V.S.A. § 578(a) (50% from 1990 levels by 2028; 75% by 2050)
- The 25 x 25 goal for renewable energy under 10 V.S.A. § 580 (25% in-state renewables supply for all energy uses by 2025)
- Building efficiency goals under 10 V.S.A. § 581 (25% of homes – or 80,000 units – made efficient by 2020)
- State energy policy under 30 V.S.A. § 202a and the recommendations for regional and municipal planning pertaining to the efficient use of energy and the siting and development of renewable energy resources contained in the State energy plans adopted pursuant to 30 V.S.A. §§ 202 and 202b
- The distributed renewable generation and energy transformation categories of resources to meet the requirements of the Renewable Energy Standard under 30 V.S.A. §§ 8004 and 8005

The standards in the checklist below will be used to determine whether a plan is consistent with these goals and policies. The standards are broken out by category. *Analysis and Targets* standards address how energy analyses are done within plans, and whether targets are established for energy conservation, efficiency, fuel switching, and use of renewable energy across sectors. *Pathways (Implementation Actions)* standards address the identification of actions to

achieve the targets. *Mapping* standards address the identification of suitable and unsuitable areas for the development of renewable energy.

Municipalities may choose to incorporate the information necessary to meet the standards in their energy elements, and/or in other sections of their plans (many transportation items may fit best in the Transportation chapters of plans, for instance). However, plans must be internally consistent, and applicants should cross-reference wherever possible.

Analysis and Targets Standards

For the *Analysis & Targets* determination standards below, municipalities will be provided with analyses and targets derived from regional analyses and targets no later than April 30, 2017 (and likely much sooner). Municipalities may choose to rely on these “municipalized” analyses and targets to meet the standards in this section. Municipalities which elect to use the analysis and targets provided by a region will be presumed to have met the standards in this section. Alternatively, municipalities may develop their own custom analyses and targets or supplement the analyses and targets provided by the regions with specific local data; if this option is chosen, the analysis and targets must include all of the same components and meet the standards required of regions, as described below.

For municipalities that choose to undertake their own analysis and target-setting (and for regions), DPS is providing a guidance document to explain the expected level of detail in and data sources and methodologies available for meeting the standards (including areas where it is understood data at the municipal level is unavailable, and therefore not expected). Note that standards 5A-4E are all derived directly from requirements in Act 174 (with minor modifications to make them feasible) and must be met affirmatively in order for a municipal plan to receive an affirmative determination of energy compliance.

Targets set by regions and municipalities should be aligned with state energy policy (see the goals and policies listed above). Where targets (and efforts to reach them) depart significantly from state energy goals and policies, an explanation for how the plan otherwise achieves the intent of the state goal or policy should be provided. The guidance document also offers additional clarification on alignment with state goals and policies.

The analysis items below are intended to provide regions and municipalities with an overview of their current energy use, and with a sense of the trajectories and pace of change needed to meet targets, which can be translated into concrete actions in the *Pathways* standards below. Targets provide regions and municipalities with milestones or checkpoints along the way toward a path of meeting 90% of their total energy needs with renewable energy, and can be compared with the potential renewable energy generation from areas identified as potentially suitable in the *Mapping* standards exercise below to give regions and municipalities a sense of their ability to accommodate renewable energy that would meet their needs.

<p>4. Does your plan’s energy element contain an analysis of resources, needs, scarcities, costs, and problems within the municipality across all energy sectors (electric, thermal, transportation)?</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: 51 et seq. Notes: Click here to enter text.</p>
<p>5. Does your plan contain an analysis that addresses A-E below, either as provided by your Regional Planning Commission or as developed by your municipality? <i>Municipalities may meet this standard by using the analysis and targets provided by their regions, or by developing their own analyses and targets. If using the analysis &</i></p>	<input type="checkbox"/> Yes-Region <input checked="" type="checkbox"/> Yes-Custom	<input type="checkbox"/> No	<p>Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: Click here to enter text.</p>

<p>targets provided by your region, please answer "Yes-Region" and skip ahead to #6. If developing a custom analysis, please answer "Yes-Custom" and address 5A-5E separately, below.</p>			
<p>A. Does the plan estimate current energy use across transportation, heating, and electric sectors?</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: 51, 52, 55 Paragraph #: Click here to enter text. Notes: Click here to enter text.</p>
<p>B. Does the plan establish 2025, 2035, and 2050 targets for thermal and electric efficiency improvements, and use of renewable energy for transportation, heating, and electricity?</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: 66, 67, 68, 69 Paragraph #: Click here to enter text. Notes: The town has not set explicit numerical targets in so much as it has already met the state targets for electric energy from renewable resources as well as the 25X25 thermal resource goal, yet continues to encourage additional renewable resource development as well as transportation alternatives.</p>
<p>C. Does the plan evaluate the amount of thermal-sector conservation, efficiency, and conversion to alternative heating fuels needed to achieve these targets?</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: 52 to 54 Paragraph #: Click here to enter text. Notes: Again, the Town has not set numerical targets but has set goals and demonstrated leadership in thermal-sector conservation, efficiency and use of alternative fuels (geothermal). More than 30% of New Haven residents heat with alternative fuels including wood, wood pellets, heat pumps and geothermal, compared to the statewide average of 18.7%. The Town's land use regulations and encouragement of a local-land based economy continues to encourage and support such alternative fuel use.</p>
<p>D. Does the plan evaluate transportation system changes and land use strategies needed to achieve these targets?</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: 56, 57 Paragraph #: Click here to enter text. Notes: The Town has a park-and-ride, encourages and is exploring additional</p>

			options for bike and walking routes, and utilizes land use strategies that emphasize local employment to reduce commuting.
E. Does the plan evaluate electric-sector conservation and efficiency needed to achieve these targets?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Page: 51, 52, 56 Paragraph #: Click here to enter text. Notes: Click here to enter text.

Pathways (Implementation Actions) Standards

This section examines whether plans meet the Act 174 expectation that they include pathways and recommended actions to achieve the targets identified through the *Analysis and Targets* section of the Standards (above). Plans are expected to include or otherwise address all of the pathways (implementation actions) below; some actions may not be applicable or equally relevant to all applicants (small vs. large municipalities, for instance), in which case N/A may be checked (if available) and the justification provided in the Notes column. There is no penalty for choosing N/A one or more times, as long as a reasonable justification is provided in the Notes column, preferably including an explanation of how the plan alternatively achieves attainment of the targets should be included. If N/A is not provided as an option, the standard must be met, and “Yes” must be checked, in order for the plan to meet the requirements for a determination (unless the instructions particular to that standard indicate otherwise).

DPS will be issuing a guidance document in the near term providing potential implementation actions derived from the Comprehensive Energy Plan (relevant formal Recommendations as well as opportunities not specifically called out as Recommendations), from recent regional and municipal plans, and from other sources. The guidance document will be revised after the regions have compiled best practices from early municipalities pursuing energy planning to seek a determination of energy compliance, in the summer of 2017.

For the time being, we offer potential implementation action options for consideration as italicized text under each standard. Plans are encouraged to promote as diverse a portfolio of approaches as possible in each sector, or if not, to explain why they take a more targeted approach. Implementation actions may fit best in a holistic discussion contained within a plan’s energy element, though cross-referencing to other relevant plan elements is also acceptable.

Municipalities must demonstrate a commitment to achieving each standard in both policies and implementation measures in clear, action-oriented language.

6. Does your plan’s energy element contain a statement of policy on the conservation and efficient use of energy?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Page: 56 Paragraph #: Click here to enter text. Notes: Click here to enter text.
A. Does the plan encourage conservation by individuals and organizations? <i>(Actions could include educational activities and events such as convening or sponsoring weatherization workshops, establishing local energy committees, encouraging the use of existing utility and other efficiency and conservation programs and funding sources, etc.)</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Page: 56 Paragraph #: Click here to enter text. Notes: The town encourages conservation through information sharing, and by modeling good practices including their energy-efficient geothermal town offices and

			library, and by siting the Town Offices and Library adjacent to the community school and recreation resources, within the village center, where residents may accomplish many errands within walking distance.
B. Does the plan promote efficient buildings? <i>(Actions could include promoting compliance with residential and commercial building energy standards for new construction and existing buildings, including additions, alterations, renovations and repairs; promoting the implementation of residential and commercial building efficiency ratings and labeling; considering adoption of stretch codes, etc.)</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Page: 52-54, 56, 57, 67, 68 Paragraph #: Click here to enter text. Notes: The Town encourages efficient buildings through information sharing and through modeling best practices, and endorses the standards in the state's Model Energy Code for new construction, and has committed to exploring methods of incentivizing energy efficient development. (68)
C. Does the plan promote decreased use of fossil fuels for heating? <i>(Actions and policies could promote switching to wood, liquid biofuels, biogas, geothermal, and/or electricity. Suitable devices include advanced wood heating systems and cold-climate heat pumps, as well as use of more energy efficient heating systems; and identifying potential locations for, and barriers to, deployment of biomass district heating and/or thermal-led combined heat and power systems in the municipality)</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Page: 52, 53, 54, 57, 67, 68 Paragraph #: Click here to enter text. Notes: The Town promotes decreased use of fossil fuel for heating through information-sharing and modeling. As a sparsely-developed rural community, district heating or combined heat/power systems are impractical for any reasonably anticipated development in the Town.
D. Does the plan demonstrate the municipality's leadership by example with respect to the efficiency of municipal buildings? <i>(Actions could include building audits and weatherization projects in schools and town offices, etc.)</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	Page: 52 Paragraph #: 5 Notes: The Town Offices are geothermal heated, energy efficient and use high-efficiency lighting; combining the Town Offices and Library in the Village Center area increased the efficiency.
E. Other (please use the notes section to describe additional approaches that your municipality is taking)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	Page: 52 and throughout Paragraph #: Click here to enter text. Notes: The Town encourages on-site renewable energy use.

<p>7. Does your plan's energy element contain a statement of policy on reducing transportation energy demand and single-occupancy vehicle use, and encouraging use of renewable or lower-emission energy sources for transportation?</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: 56, 42 Paragraph #: Click here to enter text. Notes: Encourages ride-sharing; Town has a park-and-ride lot.</p>
<p>A. Does the plan encourage increased use of public transit? <i>(Actions could include participation in efforts to identify and develop new public transit routes, promote full utilization of existing routes, integrate park-and-rides with transit routes, etc.)</i></p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Page: 56, 42 Paragraph #: Click here to enter text. Notes: Town has a park-and-ride and ACTR bus stop. The Town promotes and encourages public transport including supporting routes provided by CCTA and carpooling, and is committed to participating in and encouraging additional options such as passenger rail and expanded bus service as such opportunities arise.</p>
<p>B. Does the plan promote a shift away from single-occupancy vehicle trips, through strategies appropriate to the municipality? <i>(Actions could include rideshare, vanpool, car-sharing initiatives; efforts to develop or increase park-and-rides; enhancement of options such as rail and telecommuting; education; intergovernmental cooperation; etc.)</i></p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: 55, 56 Paragraph #: Click here to enter text. Notes: In rural Vermont such as New Haven, a combination of ride-sharing and land-use patterns to reduce commuting by encouraging local employment are most appropriate to the community.</p>
<p>C. Does the plan promote a shift away from gas/diesel vehicles to electric or other non-fossil fuel transportation options through strategies appropriate to the municipality? <i>(Actions could include promoting the installation of electric vehicle charging infrastructure, providing education and outreach to potential users, supporting non-fossil fuel vehicle availability through outreach to vehicle dealers, etc.)</i></p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: 42, 55, 56 Paragraph #: Click here to enter text. Notes: The Town encourages ride sharing and public transportation, as well as walking and biking. The Town explored installation of a charging station and determined that it is not economically feasible at present.</p>
<p>D. Does the plan facilitate the development of walking and biking infrastructure through strategies appropriate to the municipality? <i>(Actions could include studying, planning for, seeking funding for, or implementing improvements that encourage safe and convenient walking and biking; adopting a "Complete Streets" policy, etc.)</i></p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Page: 42, 56 Paragraph #: Click here to enter text. Notes: Biking, walking and horseback riding are common activities in New Haven. The Town is committed to supporting these activities as both transportation and recreation.</p>

<p>E. Does the plan demonstrate the municipality's leadership by example with respect to the efficiency of municipal transportation? (Actions could include purchasing energy efficient municipal and fleet vehicles when practicable, installing electric vehicle charging infrastructure, etc.)</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Page: 56 Paragraph #: Click here to enter text. Notes: The Town does not have fleet vehicles. The Town has established a park-and-ride and commits to looking for additional opportunities to support public transportation as well as reducing commuting trips.</p>
<p>F. Other (please use the notes section to describe additional approaches that your municipality is taking)</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Page: 56 Paragraph #: Click here to enter text. Notes: Land use regulations encourage diminishment of commuting, emphasizing a vital local land-based economy.</p>
<p>8. Does your plan's energy element contain a statement of policy on patterns and densities of land use likely to result in conservation of energy?</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: 57 Paragraph #: Click here to enter text. Notes: Click here to enter text.</p>
<p>A. Does the plan include land use policies (and descriptions of current and future land use categories) that demonstrate a commitment to reducing sprawl and minimizing low-density development? (Actions could include adopting limited sewer service areas, maximum building sizes along highways, policies or zoning that require design features that minimize the characteristics of strip development [multiple stories, parking lot to the side or back of the store], and requirements that development in those areas be connected by means other than roads and cars; adopting a capital budget and program that furthers land use and transportation policies; etc.)</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: 57 Paragraph #: Click here to enter text. Notes: Compact mixed-use centers, density based zoning, and emphasis on home occupations, home businesses, and agricultural-related local businesses.</p>
<p>B. Does the plan strongly prioritize development in compact, mixed-use centers when physically feasible and appropriate to the use of the development, or identify steps to make such compact development more feasible? (Actions could include participating in the state designation program, such as obtaining state designated village centers, downtowns, neighborhoods, new town centers, or growth centers; exploration of water or sewage solutions that enable compact development; etc.)</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Page: 57, 105 Paragraph #: Click here to enter text. Notes: Designated Village Center</p>
<p>C. Other (please use the notes section to describe additional approaches that your municipality is taking)</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Page: Throughout Paragraph #: Click here to enter text. Notes: Emphasis on home occupations and</p>

			home businesses as well as ensuring support for the local agricultural economy and agriculture-related enterprises to maintain vital local economy and minimize commuting to jobs out of the area.
9. Does your plan's energy element contain a statement of policy on the development and siting of renewable energy resources?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Notes: Click here to enter text.
A. Does the plan evaluate (estimates of or actual) generation from existing renewable energy generation in the municipality? <i>Municipalities should be able to obtain this information from their regions.</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Page: 51 Paragraph #: Click here to enter text. Notes: From Community Energy Dashboard
B. Does the plan analyze generation potential, through the mapping exercise (see <i>Mapping</i> standards, below), to determine potential from preferred and potentially suitable areas in the municipality? <i>Municipalities should be able to obtain this information from their regions.</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Page: 24 et seq. Paragraph #: Click here to enter text. Notes: New Haven is in a unique position in regards to potential energy development, in that our local distribution lines are severely constrained, and the Town already produces far more power through renewable resources than it utilizes, with more scheduled for development (including a large increase in generation at the Belden Falls dam). Analyzing potential for energy development is therefore not the focus of the Town's energy planning, but rather the need to balance our renewable energy 'portfolio' by ensuring that local residents and businesses, particularly land-based businesses like farming, can avail themselves of renewable energy resources. What little utility distribution line capacity is left in the Town is best suited to support onsite renewable development such as residential rooftop solar, or for diversification that supports local land-based businesses such as methane digesters at local farms.
C. Does the plan identify sufficient land in the municipality for renewable	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Page: 58, 63

energy development to reasonably reach 2050 targets for renewable electric generation, based on population and energy resource potential (from potential resources identified in the <i>Mapping</i> exercise, below), accounting for the fact that land may not be available due to private property constraints, site-specific constraints, or grid-related constraints? <i>If N/A, please describe how you are working with your regional planning commission to ensure overall regional objectives are achieved.</i>		<input type="checkbox"/> N/A	Paragraph #: Click here to enter text. Notes: New Haven already meets the state renewable electric generation goals, and encourages a diversity of renewable energy development including hydro and methane digesters.
D. Does the plan ensure that any local constraints (locally designated resources or critical resources, from 12B and 12C under <i>Mapping</i> , below) do not prohibit or have the effect of prohibiting the provision of sufficient renewable energy to meet state, regional, or municipal targets? <i>If N/A, please describe how you are working with your regional planning commission to ensure overall regional objectives are achieved.</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	Page: 58 Paragraph #: Click here to enter text. Notes: New Haven already meets the state renewable electric generation goals.
E. Does the plan include statements of policy to accompany maps (could include general siting guidelines), including statements of policy to accompany any preferred, potential, and unsuitable areas for siting generation (see 12 and 13 under <i>Mapping</i> , below)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Page: 58, 60 Paragraph #: Click here to enter text. Notes: Click here to enter text.
F. Does the plan maximize the potential for renewable generation on preferred locations (such as the categories outlined under 12E in the <i>Mapping</i> standards, below)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	Page: 58, 63, 64 Paragraph #: Click here to enter text. Notes: Click here to enter text.
G. Does the plan demonstrate the municipality's leadership by example with respect to the deployment of renewable energy? <i>(Actions could include deploying renewable energy to offset municipal electric use, etc.)</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: Town Offices including the library are heated with geothermal, are energy-efficient and utilize high-efficiency lighting.
H. Other (please use the notes section to describe additional approaches that your municipality is taking)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: Click here to enter text.

Mapping Standards

Act 174 requires plans to identify potential areas for the development and siting of renewable energy resources and areas that are unsuitable for siting those resources or particular categories or sizes of those resources. It furthermore requires that the standards address the potential generation from the potential siting areas.

The *Mapping* standards lay out a sequence of steps for planners to examine existing renewable resources and to identify potential (and preferred) areas for renewable energy development, and to identify likely unsuitable areas for development, by layering constraint map layers on to raw energy resource potential

map layers. The maps should help municipalities visualize and calculate the potential generation from potential areas, and compare it with the 2025, 2035, and 2050 targets from the *Analysis and Targets* standards to get a sense of the scale and scope of generation that could be produced within the region to meet the municipality's needs. DPS will provide additional guidance to accompany the standards that fleshes out the steps, layers, and standards more fully.

Plans must include maps that address all of the standards below, unless N/A is provided as an option, in which case a compelling reason why the standard is not applicable or relevant should be provided in the Notes column. Regions must develop their own maps (already underway through support being provided to regions by DPS), and to then break out the maps for their municipalities, who can use their region-provided maps to meet the municipal *Mapping* standards (such "municipalization" work is being supported through a training & technical assistance contract between DPS and regions, and all regions must supply completed maps to their municipalities by April 30, 2017, though many are expected to do so much sooner).

Municipalities may choose to rely on the maps provided by the regions to meet the standards in this section. Those maps should be somewhat familiar to municipalities, who are expected to be consulted as regions develop their maps. Alternatively, municipalities may choose to undertake their own mapping, according to the same set of standards as regions. Additionally, municipalities are expected to work collaboratively with their regions and with neighboring municipalities to ensure compatibility between the final products.

The map and the text describing the policies or rules used to construct the map, as well as the text describing specific policies applicable to map features, should be complementary. That should help ensure that any "land conservation measures and specific policies" that might be given substantial deference in the context of a particular project review under 30 V.S.A. § 248 are clearly identifiable in the text, should a map lack sufficient clarity or granularity regarding the area in which a project is proposed.

<p>10. Does your plan contain one or more maps that address 11-13 below, as provided by your Regional Planning Commission or as developed by your municipality? <i>Municipalities may meet this standard by using the maps provided by their regions, or by developing their own maps. If using the maps provided by your region, please answer "Yes-Region" and skip ahead to #14. If developing custom maps, please answer "Yes-Custom" and address 11-13 separately, below.</i></p>	<input checked="" type="checkbox"/> Yes-Region <input checked="" type="checkbox"/> Yes-Custom <input type="checkbox"/> No	<input type="checkbox"/> No	<p>Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: Environmental constraints maps are from Regional Planning; resource location and utility constraints maps are from GMP and the Community Energy Dashboard.</p>
<p>11. Does the plan identify and map existing electric generation sources? <i>Maps may depict generators of all sizes or just those larger than 15 kW, as long as information on generators smaller than 15 kW is summarized and provided or referenced elsewhere. It is expected that the best available information at the time of plan creation will be used. This information is available from the DPS.</i></p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Page: 58, 59 Paragraph #: Click here to enter text. Notes: Click here to enter text.</p>
<p>12. Does the plan identify potential areas for the development and siting of renewable energy resources and the potential generation from such generators in the identified areas, taking into account factors including resource availability, environmental constraints, and the location and</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: 58 Paragraph #: Click here to enter text. Notes: Click here to enter text.</p>

<p>capacity of electric grid infrastructure? <i>Maps should include the following (available from VCGI and ANR), and the resulting Prime and Secondary Resource Maps will together comprise "potential areas":</i></p>			
<p>A. Raw renewable energy potential analysis (wind and solar), using best available data layers (including LiDAR as appropriate)</p>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<p>Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: This map was not available at the time of publication of the Town Plan. Additionally, it did not seem substantively necessary for this Town energy plan. The Town is encouraging a diversity of renewable energy resources, including hydropower (which is limited to its major waterways) and methane digesters (which may be sited on any agricultural land), while the siting of wind and solar other than for on-site use is at present significantly constrained by utility distribution system limitations. The Town will work with Regional Planning to develop a map with these resources suitable for publication in the next Town Plan.</p>
<p>B. Known constraints (signals likely, though not absolute, unsuitability for development based on statewide or local regulations or designated critical resources) to include:</p> <ul style="list-style-type: none"> • Vernal Pools (confirmed and unconfirmed layers) • DEC River Corridors • FEMA Floodways • State-significant Natural Communities and Rare, Threatened, and Endangered Species • National Wilderness Areas • Class 1 and Class 2 Wetlands (VSWI and advisory layers) • Regionally or Locally Identified Critical Resources <p><i>If areas are constrained for the development of renewable energy due to the desire to protect a locally designated critical resource (whether a natural resource or a community-identified resource), then the land use policies applicable to other forms of development in this area must</i></p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: 59, 60, 61 Paragraph #: Click here to enter text. Notes: Click here to enter text.</p>

<p><i>be similarly restrictive; for this category, policies must prohibit all permanent development (and should be listed in the Notes column).</i></p> <p><i>These areas should be subtracted from raw renewable energy resource potential maps to form Secondary Resource Maps</i></p>			
<p>C. Possible constraints (signals conditions that would likely require mitigation, and which may prove a site unsuitable after site-specific study, based on statewide or regional/local policies that are currently adopted or in effect), including but not limited to:</p> <ul style="list-style-type: none"> • Agricultural Soils • FEMA Special Flood Hazard Areas • Protected Lands (State fee lands and private conservation lands) • Act 250 Agricultural Soil Mitigation areas • Deer Wintering Areas • ANR's Vermont Conservation Design Highest Priority Forest Blocks (or Habitat Blocks 9 & 10, for plans using regional maps in regions whose plans will be submitted for adoption at the regional level by March 1, 2017) • Hydric Soils • Regionally or Locally Identified Resources <p><i>If locations are constrained for the development of renewable energy due to the desire to protect a locally designated resource (whether a natural resource or community-identified resource, like a view), then the land use policies applicable to other forms of development must be similarly restrictive (and should be listed in the Notes column).</i></p> <p><i>These areas should be subtracted from Secondary Resource Maps to form Prime Resource Maps.</i></p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: 62</p> <p>Paragraph #: Click here to enter text.</p> <p>Notes: Click here to enter text.</p>
<p>D. Transmission and distribution resources and constraints, as well as transportation infrastructure.</p> <p><i>(Including three-phase distribution lines, known constraints from resources such as Green Mountain Power's solar map, known areas of high electric load, etc.)</i></p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: 59</p> <p>Paragraph #: Click here to enter text.</p> <p>Notes: Click here to enter text.</p>
<p>E. Preferred locations (specific areas or parcels) for siting a generator</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: 58, 63, 64</p>

<p>or a specific size or type of generator, accompanied by any specific siting criteria for these locations</p> <p><i>Narrative descriptions of the types of preferred areas in accompanying plan text are acceptable, though mapping of areas and especially specific parcels (to the extent they are known) is highly encouraged, to signal preferences to developers, particularly for locally preferred areas and specific parcels that do not qualify as a statewide preferred location under i. below.</i></p> <p><i>The locations identified as preferred must not be impractical for developing a technology with regard to the presence of the renewable resource and access to transmission/distribution infrastructure.</i></p>		<input type="checkbox"/> N/A	<p>Paragraph #: Click here to enter text.</p> <p>Notes: Narrative encourages diverse renewable energy development including hydro, onsite wind and solar, methane digesters, and conservation. Preferred sites include rooftops and any locations already in renewable energy development; if the utility distribution line constraints are lifted at some point in the future, then the Town's industrial zones are available for additional renewable energy development.</p>
<p>i. Statewide preferred locations such as rooftops (and other structures), parking lots, previously developed sites, brownfields, gravel pits, quarries, and Superfund sites</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Page: 63</p> <p>Paragraph #: Click here to enter text.</p> <p>Notes: Encourages rooftop solar for onsite use</p>
<p>ii. Other potential locally preferred locations</p> <p><i>For example, customer on- or near-site generation, economic development areas, unranked and not currently farmed agricultural soils, unused land near already developed infrastructure, locations suitable for large-scale biomass district heat or thermal-led cogeneration, potential locations for biogas heating and digesters, etc.</i></p> <p><i>These are particularly important to map if possible, as "a specific location in a duly adopted municipal plan" is one way for a net metering project to qualify as being on a preferred site.</i></p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	<p>Page: 63-64</p> <p>Paragraph #: Click here to enter text.</p> <p>Notes: Methane digesters may be sited in town on any farmland; wind and solar may be located for onsite use and existing facilities may continue indefinitely at their present locations; if utility distribution line constraints are lifted from their present 'red' designation, these facilities may also be sited in the Town's industrial zones.</p>
<p>13. Does the plan identify areas that are unsuitable for siting renewable energy resources or particular categories or sizes of those resources? Either Yes or No ("No" if the plan chooses not to designate any areas as unsuitable) is an acceptable answer here. "Resources" is synonymous with "generators."</p>	<input checked="" type="checkbox"/> Yes ("Yes" for A and B must also be selected below)	<input type="checkbox"/> No	<p>Page: 58-65</p> <p>Paragraph #: Click here to enter text.</p> <p>Notes: Note that the Town --which is already the site of one 2.2MW solar facility, and a second 2.2MW solar facility has recently acquired its CPG -- has determined that Standard Offer projects are inappropriately scaled for future development in the Town. Additionally, the Town has precluded development of Concentrated Solar Power -- i.e. mirror systems that concentrate heat to create steam power. These systems are not yet</p>

			addressed by state regulations, and the Town was concerned that state plans referencing solar energy might be interpreted as including these highly reflective systems -- a concern bolstered by the presence of a miniature demonstration model in an adjacent town. Such systems raise numerous aesthetic and land-occupancy concerns.
<p>A. Are areas identified as unsuitable for particular categories or sizes of generators consistent with resource availability and/or land use policies in the regional or municipal plan applicable to other types of land development (answer only required if "Yes" selected above, indicating unsuitable areas have been identified)?</p> <p><i>If areas are considered unsuitable for energy generation, then the land use policies applicable to other forms of development in this area should similarly prohibit other types of development. Please note these policies in the Notes column.</i></p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A (if no unsuitable areas are identified)	<p>Page: Click here to enter text.</p> <p>Paragraph #: Click here to enter text.</p> <p>Notes: Industrial uses in New Haven are limited to industrial zones, as are commercial-scale or off-site-use solar developments. Methane digesters are allowed on any farm and thus are consistent with agricultural development. Wind and solar for onsite use are allowed in any zone and are thus compatible in scale to other development in these zones. Land use planning and zoning restrictions apply to all land uses in the Town. However, numerous constraints exist that affect energy development that do not affect other development, including utility distribution line constraints (most of the Town is designated as 'red' on the GMP solar map) and limited resource areas for energy development such as hydro power.</p>
<p>B. Does the plan ensure that any regional or local constraints (regionally or locally designated resources or critical resources, from 12b-12c above) identified are supported through data or studies, are consistent with the remainder of the plan, and do not include an arbitrary prohibition or interference with the intended function of any particular renewable resource size or type?</p> <p><i>Please explain in the Notes column.</i></p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<p>Page: Click here to enter text.</p> <p>Paragraph #: Click here to enter text.</p> <p>Notes: The Town already produces far more power than it utilizes, from hydro, solar and wind resources. The Town limitations on siting of additional resources can not therefore be said to arbitrarily prohibit or interfere with any particular renewable resource size or type. One goal of the Town is to ensure that enough distribution</p>

			<p>resource space remains in local utility infrastructure to ensure that local residents may install facilities for onsite use, and that diverse energy resources such as methane digesters and other local-land-based-generation resources may be developed.</p>
<p>14. Municipalities seeking a determination of energy compliance from the Department and not using their region's maps only: Does the plan ensure that its approach, if applied regionally, would not have the effect of prohibiting any type of renewable generation technology in all locations?</p>	<p><input checked="" type="checkbox"/> Yes (also check Yes if seeking determination from region, or from DPS but using region-provided maps)</p>	<p><input type="checkbox"/> No</p>	<p>Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: Since New Haven already produces far more electric power by renewable means that it uses, and already meets 25X25 goals for thermal energy, and is to be the anticipated location of a HVDC line converter station channeling massive amounts of renewable energy into the regional grid, applying its approach across the county would ensure county-wide compliance with state goals. The limitations New Haven places on additional renewable development by virtue of this Town Plan arise because New Haven has already met state goals for renewable energy generation, and faces severe utility infrastructure constraints. If adopted throughout Addison County, such an approach would not in any way curtail renewable development.</p>