

Municipal Energy Planning Standards - Abridged

Plan Adoption Requirement

1. Has your plan been duly adopted and approved for confirmation according to [24 V.S.A. § 4350](#)? (Y/N), Adoption date: March 16, 2020, Confirmation date: **N-Approval is pending, hearing to be held April 30, 2020.**
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? (Y/N) **Y-**

Energy Element Requirement

3. **Does the plan contain an energy element, that contains the same components described in 24 V.S.A. § 4348a(a)(3)?** (Y/N) **Y**

Analysis & Targets Standards

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)?** (Y/N) **Y**
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? (Y-Region or Y-Custom/N; if Y-Region, skip to #6; if Y-Custom, address A-E below)
Y-Region Does the plan estimate current energy use across transportation, heating, and electric sectors? **Y**
 - A. 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? (Y/N) **Y-Table 13 (Residential and Commercial Thermal Efficiency); Table 14-Electric Efficiency Improvement; Table 16 Renewables (Fuel Switching Targets) for Transportation; and Table 15 Renewables (Fuel Switching Targets) for Thermal Residential and Commercial**
 - B. Does the plan evaluate the amount of thermal-sector conservation, efficiency, and conversion to alternative heating fuels needed to achieve these targets? (Y/N)
Y – Second to last paragraph on page 34.
 - C. Does the plan evaluate transportation system changes and land use strategies needed to achieve these targets? (Y/N)
Y-Land Use Patterns and Energy Conservation links dense development to shorter streets (page 33). The Economic Development Section also emphasizes the need for improved broadband, which could eliminate some driving. (page 55)
 - D. Does the plan evaluate electric-sector conservation and efficiency needed to achieve these targets? (Y/N) **Y page 33-34**

Pathways (Implementation Actions) Standards

6. **Does your plan's energy element contain a statement of policy on the conservation and efficient use of energy?** (Y/N) **Y page 33, and goals and strategies, page 38**

- A. Does the plan encourage conservation by individuals and organizations? (Y/N) **Y (pages 33 & 38)**
 - B. Does the plan promote efficient buildings? (Y/N) **Y (page 33)**
 - C. Does the plan promote decreased use of fossil fuels for heating? (Y/N) **Y (page 34 and Strategy #3 on page 38)**
 - D. Does the plan demonstrate the municipality's leadership by example with respect to the efficiency of municipal buildings? (Y, N, N/A) **Y (Strategy #6 on page 38 – please note that Troy already has some energy audits done on the town clerk's off and the fire station that may still be relevant.)**
7. Other (Y, N, N/A) 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? (Y/N) **Y – page 34 has a discussion on the use of biofuels. The transportation plan does note that there is no public transit. (page 22) In absence of getting transit in Troy, other options might be to carpool or improve telecommunications. There is a strategy for promoting ride-sharing (page 39), and the economic development plan calls for improved telcom (page 55). The latter might be strengthened by directly linking it to reduced VMT.**
- A. Does the plan encourage increased use of public transit? (Y, N, N/A) – **N/A**
 - B. Does the plan promote a shift away from single-occupancy vehicle trips through strategies appropriate to the municipality? (Y/N) **Y- (page 39)**
 - 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? (Y/N) **Y-(page 39)**
 - D. Does the plan facilitate the development of walking and biking infrastructure through strategies appropriate to the municipality? (Y, N, N/A) **Y – (Bicycle Facilities and Pedestrian Facilities, page 21)**
 - E. Does the plan demonstrate the municipality's leadership by example with respect to the efficiency of municipal transportation? (Y, N, N/A) **Y – (Grants for EV charging stations, page 39)**
 - F. Other (Y, N, N/A)
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?** (Y/N) **Y**
- 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? (Y/N) **Y-(page 33)**
 - 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? (Y, N, N/A) **Y (page 10, Village Center Designation, rezoning village districts; page 29, Develop future forecasts for town water and sewer capacity demand and plan upgrades accordingly)**
 - C. Other (Y, N, N/A) **N/A**
9. **Does your plan's energy element contain a statement of policy on the development and siting of renewable energy resources?** (Y/N) **Y- But it is very permissive and is not likely to influence PUC rulings. The plan essentially asks for due consideration of scenic views. (page 38)**
- A. Does the plan evaluate (estimates of or actual) generation from existing renewable energy generation in the region, and break this information out by municipality? (Y/N) **Y – Tables 17 and 18**
 - B. Does the plan analyze generation potential, through the mapping exercise (see *Mapping*

standards, below), to determine potential from preferred and potentially suitable areas in the municipality? (Y/N) **Y – page 37 and maps**

- C. Does the plan identify sufficient land in the municipality for renewable energy development to reasonably reach 2050 targets for renewable electric generation, based on population and energy resource potential (from potential resources identified in the *Mapping* exercise, below), accounting for the fact that land may not be available due to private property constraints, site-specific constraints, or grid-related constraints? (Y, N, N/A) **Y- Table 19**
- D. Does the plan ensure that any local constraints (locally designated resources or critical resources, from 12B and 12C under *Mapping*, below) do not prohibit or have the effect of prohibiting the provision of sufficient renewable energy to meet state, regional, or municipal targets? (Y, N, N/A) **Y- Table 19 has generous contingencies built in the estimates.**
- 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 *Mapping*, below)? (Y/N) **Y – The plan policies on their own are unlikely to influence on their own in scenic areas; however, the plan intends to incorporate screening provisions into their zoning bylaw.**

- F. Does the plan maximize the potential for renewable generation on preferred locations? (such as the categories outlined under 12E in the *Mapping* standards, below)? (Y, N, N/A) **N/A – there are additional preferred sites, specific or by type.**
- G. Does the plan demonstrate the municipality’s leadership by example with respect to the deployment of renewable energy? (Y, N, N/A) **Y- Strategy 1, page 38**
- H. Other (Y, N, N/A)

Mapping Standards

- 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? (Y-Region or Y-Custom/N; if Y-Region, skip to #14; if Y-Custom, address 11-13 below) **Y-Region**
- 11. Does the plan identify and map existing electric generation sources? (Y, N, N/A)
- 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 capacity of electric grid infrastructure? (Y/N)
 - A. Raw renewable potential analysis (wind and solar), using best available datalayers (including LiDAR as appropriate) (Y/N)
 - B. Known constraints (signals likely, though not absolute, unsuitability for development based on statewide or local regulations or designated critical resources) to include: (Y/N)
 - 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
 - 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: (Y/N)
 - 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 that will be submitted for adoption at the regional level by March 1, 2017)
 - Hydric Soils
 - Regionally or Locally Identified Resources

- D. Transmission and distribution resources and constraints, as well as transportation infrastructure. (Y/N)
- E. Preferred locations (specific areas or parcels) for siting a generator or a specific size or type of generator, accompanied by any specific siting criteria for these locations (Y, N, N/A)
 - i. Statewide preferred locations such as rooftops (and other structures), parking lots, previously developed sites, brownfields, gravel pits, quarries, and Superfund sites (Y, N, N/A)
 - ii. Other potential locally preferred locations (Y, N, N/A)

13. Does the plan identify areas that are unsuitable for siting renewable energy resources or particular categories or sizes of those resources? (Y/N)

- 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)? (Y, N, N/A)
- B. Does the plan ensure that any regional or local constraints (regionally or locally designated resources or critical resources, from 11B-11C 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? (Y/N)

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 generation technology in all locations? (Y/N) **N/A**