

MEMO

Date: June 8, 2021

To: Board of Commissioners From: Clare Rock, Senior Planner

Re: Plainfield Municipal Plan Review

ACTION REQUESTED:

1. Approve the Plainfield 2021 Town Plan.

2. Issue an affirmative Determination of Energy Compliance for the Plainfield Town Plan.

3. Confirm the Town of Plainfield's planning process.

On Thursday June 3, 2021 the Municipal Plan Review Committee held a public hearing on the Plainfield 2021 Town Plan. At the close of the hearing the MPRC voted to recommend:

- Approval of the Plainfield 2021 Town Plan,
- An affirmative determination of energy compliance, and
- Confirmation of the Town of Plainfield's municipal planning process.

Attached please find:

• The RPC memo containing the staff review.



RESOLUTION

Whereas Title 24, VSA, Section §4350 requires that regional planning commissions, after public notice, shall review the planning process of member municipalities and shall so confirm when a municipality:

- 1. is engaged in a continuing planning process that, within a reasonable time, will result in a plan that is consistent with the goals contained in 24 V.S.A. § 4302;
- 2. is engaged in a process to implement its municipal plan, consistent with the program for implementation required under 24 V.S.A. § 4382; and
- 3. is maintaining its efforts to provide local funds for municipal and regional planning purposes;

Whereas as part of the consultation process, a regional planning commission shall consider whether a municipality has adopted a plan;

Whereas a regional planning commission shall review and approve plans of its member municipalities, when approval is requested and warranted, and a commission shall approve a plan if it finds that the plan:

- 1. is consistent with the goals established in 24 V.S.A. § 4302;
- 2. is compatible with its regional plan;
- 3. is compatible with approved plans of other municipalities in the region; and
- 4. contains all the elements included in 24 V.S.A. § 4382(a)(1)-(12);

Whereas the Town of Plainfield prepared a municipal plan in accordance with 24 V.S.A Chapter 117;

Whereas the Central Vermont Regional Planning Commission concluded that the *Plainfield, Vermont 2021 Town Plan* meets the requirements for approval; now, therefore, be it

Resolved, that the Central Vermont Regional Planning Commission:

- 1. approves the 2021 Plainfield, Vermont 2021 Town Plan adopted April 12, 2021; and
- 2. consulted with and confirms the planning process of the Town of Plainfield.

Under 24 V.S.A. § 4350, when an adopted municipal plan expires, its approval and confirmation of the municipality's planning process also expire. Recommendations made by the Central Vermont Regional Planning Commission are attached and should be considered when developing the next municipal plan.

A municipality that has adopted a plan may define and regulate land development in any manner that the municipality establishes in its bylaws, provided those bylaws are in conformance with the plan and are adopted for the purposes set forth in 24 V.S.A. § 4302.

ADOPTED by the Central Vermont Regional Planning Commission on June 8, 2021.
Laura Hill-Eubanks, Chair



DETERMINATION OF ENERGY COMPLIANCE

Determination of Energy Compliance Pursuant to 24 V.S.A. §4352 Plainfield, Vermont 2021 Town Plan, adopted April 12, 2021

I. Procedural History

- 1. On April 15, 2021, the Town of Plainfield submitted the *Plainfield, Vermont 2021 Town Plan* to the Central Vermont Regional Planning Commission ("CVRPC") for a determination of compliance with the enhanced energy planning standards set forth in 24 V.S.A. §4352.
- 2. On May 14, 2021, notice of a public hearing scheduled for June 3, 2021 was posted on the CVRPC website. CVRPC is the entity from which the determination is requested.
- 3. On May 18, 2021, notice of a public hearing scheduled for June 3, 2021 was published in the Barre-Montpelier Times Argus.
- 4. On May 14, 2021, notice of a public hearing scheduled for June 3, 2021 was emailed directly to the Town of Plainfield and posted in three other locations within the region.
- 5. On June 3, 2021, CVRPC's Municipal Plan Review Committee convened a public hearing via Zoom software with no physical location per the standards set forth in Act 92 during the COVID-19 Pandemic. The public hearing concluded on June 3, 2021, at which time the Municipal Plan Review Committee recommended that the *Plainfield, Vermont 2021 Town Plan* receive a determination of energy compliance with the enhanced energy planning standards set forth in 24 V.S.A. §4352.
- 6. On June 8, 2021, CVRPC's Board of Commissioners reviewed the recommendation of the Municipal Plan Review Committee and voted to approve the determination of energy compliance pursuant to 24 V.S.A. §4352 with ____ affirmatives and ____ abstentions.

II. Public Comments

No members of the public were present at the three public hearings held by the Town of Plainfield. Four (4) members of the Plainfield Town Planning Commission were present at the June 3, 2021 Municipal Plan Review Committee meetings. ____ members of the public were present at the June 8, 2021 Central Vermont Regional Planning Commission Board of Commissioners meeting.

III. Conclusions

- 1. The *Plainfield, Vermont 2021 Town Plan* includes an energy element that has the same components as described in 24 V.S.A. §4348a(a)(3) for a regional plan and is confirmed under the requirements of 24 V.S.A. §4350.
- 2. The Plainfield, Vermont 2021 Town Plan is consistent with following State goals:
 - A. Vermont's greenhouse gas reduction goals under 10 V.S.A. § 578(a);
 - B. Vermont's 25 by 25 goal for renewable energy under 10 V.S.A. § 580;
 - C. Vermont's building efficiency goals under 10 V.S.A. § 581;
 - D. State energy policy under 30 V.S.A. § 202a and the recommendations for regional and municipal energy 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 (State energy plans); and
 - E. 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.
- 3. The *Plainfield, Vermont 2021 Town Plan* meets the standards for issuing a determination of energy compliance included in the State energy plans as developed by the Vermont Department of Public Service.

Dated this 8 th day of June, 2022	1.
	 Laura Hill-Eubanks, Chair
	Central Vermont Regional Planning Commission



MEMO

Date: May 6, 2021, updated May 26, 2021
To: Municipal Plan Review Committee

CC: Will Colgan, Plainfield Planning Commission Chair

From: Grace Vinson, Planner

Re: Plainfield Municipal Plan Review for Regional Approval, Confirmation of Planning

Process, and Determination of Energy Compliance

ACTION REQUESTED: At the meeting the Committee will hold a public hearing on the *Plainfield, Vermont 2021 Town Plan*. Following the hearing the Committee will be tasked with making **three** recommendations to the Board of Commissioners:

- a) confirmation of the planning process under 24 VSA §4350(a); and
- b) approval of the municipal plan per 24 V.S.A. § 4350(b);
- c) affirmative determination of energy compliance per 24 V.S.A. §4352

<u>Background</u>	
Aril 8, 2014	CVRPC Board regionally approves 2014 Plainfield Town Plan and confirms Town planning process.
April 9, 2019	Plainfield Town Plan expires.
• •	•
April 12, 2021	Selectboard holds second public hearing on the <i>Plainfield, Vermont 2021 Town Plan</i> and adopts the Plan.
April 15, 2021	Plainfield requests approval by CVRPC and submits final plan adopted by Selectboard.
May 4, 2021	CVRPC issues a public notice of the May 19, 2021 MPRC hearing, however the Times Argus failed to publish the notice at least 15-days prior, the Hearing was re-scheduled and re-warned to ensure all statutory deadlines were met.
May 14, 2021	CVRPC rescheduled Hearing Notice is distributed and appeared in the paper on May 18, 2021.
June 3, 2021	CVRPC Municipal Plan Review Committee (MPRC) scheduled to hold public hearing.
June 8, 2021	CVRPC Board scheduled to vote upon MPRC recommendation.

Plainfield, Vermont 2021 Town Plan

To view the plan, please visit: https://centralvtplanning.org/towns/plainfield/
or https://www.plainfieldvt.us/planning-commission.html. If you would prefer hard copies of the Plan, please contact Nancy Chartrand chartrand@cvregion.com

The <u>Plainfield</u>, <u>Vermont 2021 Town Plan</u> is an update to the previous 2014 Plainfield Town Municipal Plan. Much of the data has been updated to reflect current trends in the area, and new maps have been included.

Staff Review

CVRPC staff reviewed the Municipal Plan for following items:

a) confirmation of the planning process under 24 VSA §4350(a);

- is engaged in a continuing planning process that, within a reasonable time, will result in a plan which is consistent with the goals contained in section 4302 of this title; and
- ☑ is maintaining its efforts to provide local funds for municipal and regional planning purposes.

<u>Staff findings and recommendations:</u> Staff finds the Town of Plainfield to be engaged in a continuing planning process and is maintaining its efforts to provided funds for planning purposes.

b) approval of the municipal plan per 24 V.S.A. § 4350(b);

- consistency with the State goals established in section §4302
 Staff findings and recommendations: Staff finds the plan to be consistent with the State Goals, and provides the following recommendations for the next update:
 - > State Goal 3: To broaden access to educational and vocational training opportunities sufficient to ensure the full realization of the abilities of all Vermonters.
 - The most recent update to the Plainfield Town Plan includes a satisfactory discussion on educational opportunities in Plainfield. However, the plan does not provide detail on effects of declining enrollment at Twinfield Union School and Goddard College, and does not identify clear action items that the Town may implement to address this issue.
 - Staff recommends further consideration of future uses of educational facilities and other needs for the facilities themselves. The section of the plan lacks a goals/policies section, and this may be useful to include in order to start planning for the future of these facilities.
 - State Goal 13: To ensure the availability of safe and affordable child care and to integrate child care issues into the planning process, including child care financing, infrastructure, business assistance for child care providers, and child care work force development.
 - The most recent update to the Plainfield Town Plan includes a satisfactory discussion on child care provision in Town and takes a stance on not preventing it from being built. However, the plan does not identify clear action items that the Town may implement to address the need that may be present. The survey

results indicate that 37% of respondents (27 out of 72) are unsatisfied or very unsatisfied with the availability of childcare.

Examples to address this need include: Maintaining a listing of providers in or near Barre Town on the municipal website, encouraging local businesses to offer assistance to childcare businesses, and developing partnerships with large employers to identify workforce childcare needs and develop strategies to meet those needs. More information on meeting the State's Child Care goal may be found in this document published by the Windham Regional Commission.

Staff findings: staff finds the plan to be compatible with the regional plan.

- compatibly with approved plans of other municipalities in the region Staff findings and recommendation: staff finds the plan to be compatible with approved plans of other municipalities.
- containing all the elements included in section § 4382
 Staff findings and recommendation: staff finds the plan to contain all of the required elements

c) c) Issuance of an affirmative determination of energy compliance per 24 V.S.A. § 4352;

☑ in the case of a municipal plan, include an energy element that has the same components as described in subdivision 4348a(a)(3) of this title for a regional plan and be confirmed under section 4350 of this title:

<u>Staff findings and recommendation</u>: Staff finds the Plainfield 2021 Town Plan contains an energy element as described in subdivision 4348a(a)(3)..

- ☑ be consistent with the following, with consistency determined in the manner described under subdivision 4302(f)(1) of this title:
 - (A) Vermont's greenhouse gas reduction goals under 10 V.S.A. § 578(a);
 - (B) Vermont's 25 by 25 goal for renewable energy under 10 V.S.A. § 580;
 - (C) Vermont's building efficiency goals under 10 V.S.A. § 581;
 - (D) State energy policy under 30 V.S.A. § 202a and the recommendations for regional and municipal energy 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; and
 - (E) 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;

<u>Staff findings and recommendations</u>: Staff finds that the Plainfield 2021 Town Plan is consistent with the goals and policies in subdivision 4302(f)(1)(A) through (E) above.

<u>Staff findings and recommendations:</u> Staff finds that the Plainfield 2021 Town Plan meets the standards for issuing a determination of energy compliance.

References:

To view the Central Vermont Regional Plan visit: http://centralvtplanning.org/wp-content/uploads/2012/03/2016-Central-Vermont-Regional-Plan-ADOPTED-06.12.2018-Reduced.pdf

To view Title 24 Chapter 117: Municipal and Regional Planning and Development statutory requirements in their entirety please visit: https://legislature.vermont.gov/statutes/title/24

Municipal Plan Review Tool

Municipality:	Plan date:	Staff:	Date:
Plainfield	4/12/21	G. Vinson	05/06/21

This form addresses the statutory requirements of the State of Vermont for town plans, as cited in the Vermont Municipal and Regional Planning and Development Act, Title 24 V.S.A Chapter 117 (the Act). It includes the 12 required elements found in § 4382 of the Act; the four planning process goals found in § 4302(b), the 14 specific goals found in § 4302(c); and the

FYI:
Act 171 Requirements (Forest Integrity): required for plans adopted after Jan 1, 2018
Act 174 Requirements (Energy)
CVRPC Housing Distrib. Requirements: removed

Nov 2020

standard of review found in § 4302(f), which covers consistency with goals and compatibility standards.

During the Regional approval and confirmation process, specified in § 4350 of the Act, the regional planning commission is required to assess town plans and the process whereby they are developed according to the criteria of the Act. Sections of relevant statute are quoted at each question.

	Required Elements § 4382	Met	Not Met
1	Statement of Objectives, Policies, Programs	\boxtimes	
2	Land Use Plan and Map	\boxtimes	
3	Transportation Plan and Map	\boxtimes	
4	Utility and Facility Plan and Map	\boxtimes	
5	Rare Natural Resources/Historic Resources	\boxtimes	
6	Educational Facilities Plan and Map	\boxtimes	
7	Implementation Program	\boxtimes	
8	Compatibility Statement	\boxtimes	
9	Energy Plan	\boxtimes	
10	Housing Element	\boxtimes	
11	Economic Development Element	\boxtimes	
12	Flood Resiliency Plan	\boxtimes	
	State Planning Goals § 4302	Met	Not Met
1	Compact village centers	\boxtimes	
2	Economy	\boxtimes	
3	Education	\boxtimes	
4	Transportation	\boxtimes	
5	Natural and Historic Resources	\boxtimes	
6	Quality of air, water, wildlife, and land resources	\boxtimes	
7	Efficient use of Energy and Renewable Energy Resources	\boxtimes	
8	Recreation	\boxtimes	
9	Agriculture and Forest Industries	\boxtimes	
10	Use of Resources and Earth Extraction	\boxtimes	
11	Safe and Affordable Housing	\boxtimes	
12	Public Facilities and services	\boxtimes	
13	Child Care	\boxtimes	
14	Flood Resiliency	\boxtimes	\boxtimes

MUNICIPAL PLAN REQUIRED ELEMENTS

Title 24 Chapter 117: Municipal and Regional Planning and Development 24 V.S.A. § 4382. The plan for a municipality

- (a) A plan for a municipality may be consistent with the goals established in section 4302 of this title and compatible with approved plans of other municipalities in the region and with the regional plan and shall include the following:
- (1) A statement of objectives, policies and programs of the municipality to guide the future growth and development of land, public services and facilities, and to protect the environment.

Comments:

- (2) A land use plan, which shall consist of a map and statement of present and prospective land uses, that:
 - (A) Indicates those areas proposed for forests, recreation, agriculture (using the agricultural lands identification process established in 6 V.S.A. § 8), residence, commerce, industry, public, and semi-public uses, and open spaces, areas reserved for flood plain, and areas identified by the State, the regional planning commission, or the municipality that require special consideration for aquifer protection; for wetland protection; for the maintenance of forest blocks, wildlife habitat, and habitat connectors; or for other conservation purposes.
 - (B) Sets forth the present and prospective location, amount, intensity, and character of such land uses and the appropriate timing or sequence of land development activities in relation to the provision of necessary community facilities and service.
 - (C) Identifies those areas, if any, proposed for designation under chapter 76A of this title, together with, for each area proposed for designation, an explanation of how the designation would further the plan's goals and the goals of section 4302 of this title, and how the area meets the requirements for the type of designation to be sought.
 - (D) Indicates those areas that are important as forest blocks and habitat connectors and plans for land development in those areas to minimize forest fragmentation and promote the health, viability, and ecological function of forests. A plan may include specific policies to encourage the active management of those areas for wildlife habitat, water quality, timber production, recreation, or other values or functions identified by the municipality.

Pages: 30-36, 112-116, 47-48, 64-65, 112-114

Choose an item. Pages: 108-114 MAPS

Land Use Plan

Comments:

- See future land use map (p.204) and descriptions of land use areas (Section 10.2 Future Land Use and Section 10.1 Current Land Use).
- See Sections 10.2 for discussion of implications of further development on each zoning district.

(3) A transportation plan, consisting of a map and statement of present and prospective transportation and circulation facilities showing existing and proposed highways and streets by type and character of improvement, and where pertinent, parking facilities, transit routes, terminals, bicycle paths and trails, scenic roads, airports, railroads and port facilities, and other similar facilities or uses, with indications of priority of need;

Comments:

- Transportation section references map and provides overview of all transportation considerations in Plainfield
- Section starts with overview of road system with subsections for US Route 2 & Main St Intersection and Pedestrian Bridge project (Section 7.2), Public Transportation (Section 7.3), Road Maintenance & Access Management (Section 7.4), Pedestrian, Bicycle and Trails (Section 7.5), and Park & Ride & Parking (Section 7.6), and Rail & Air (Section 7.7).
- Discusses current conditions and projections for traffic as well as issues and opportunities. Includes discussion of multi-modal accommodations (pedestrian, bike, park & ride) and associated recommendations, public transit (bus and bicycle).
- (4) A utility and facility plan, consisting of a map and statement of present and prospective community facilities and public utilities showing existing and proposed educational, recreational and other public sites, buildings and facilities, including hospitals, libraries, power generating plants and transmission lines, water supply, sewage disposal, refuse disposal, storm drainage and other similar facilities and activities, and recommendations to meet future needs for community facilities and services, with indications of priority of need, costs and method of financing;

Choose an item.
Pages: 67-101
MAP
Utility and Facility ⊠

Comments:

- Picture on p 67 of town facilities
- Chapter includes discussion of Town Hall/Opera House, Municipal Building, Village Trustee Building, Cemeteries, Town Garage, lighting, water supply & wastewater treatment, solid waste program, emergency services, town parks/conservation lands/recreation areas, library, Health Center, Senior Center, child care, and telecommunications facilities and infrastructure, and print media/public access/community forums
- Detailed discussion (pg. 67 to 71) of Town Hall/Opera House as centerpiece of community that
 enriches cultural/economic life of Plainfield, details renovations and restoration work to upgrade
 building into facility suitable for cultural and municipal events
- Discussion of Health Center as vital community health resource that provides significant economic benefit to Town on page 91
- General tone is that regional cooperation and coordination with neighboring towns and partners
 (Marshfield, Goddard College) should be encouraged, such as exploring potential to share space and
 equipment with other departments for emergency services, working with Goddard College to certify
 shelter, and participating in CV Fiber to ensure communications infrastructure is up to date

(5) A statement of policies on the preservation of rare and irreplaceable natural areas, scenic and historic features and resources;

Choose an item. Pages: 16-17, 67-71, 19-35, 28, 30 to 35, 86 to 88

Comments:

- Detailed discussion (pg. 67 to 71) of Town Hall/Opera House as historic resource and centerpiece of community work
- Page 12-13 discusses historically significant sites
- Community character goals including protection of historical resources p 16 to 17
- Section 3.7 on page 28 discusses Bald Hill, Spruce Mountain, as scenic resources
- Section 8.3 (page 86 to 88) discusses recreational resources
- Chapter 3 provides overview of natural resources, with discussion of ecological inventory, physical
 landscape, slope and elevation, agricultural soils, forest blocks and habitat connectivity,
 connectivity, surface water, groundwater, floodplains/river corridors, wetlands and vernal pools,
 and other biologically significant areas, air quality, and resource extraction
- Goals and objectives for natural areas: p 30-35

(6) An educational facilities plan consisting of a map and statement of present and projected uses and the local public school system; Page 89

Comments:

- Section 8.24 provides overview of school system.
- Goddard College is mentioned.
- Plan discusses declining enrollment at Twinfield Union School

Choose an item. Pages: 89,

MAP

Educational Facility

(7) A recommended program for the implementation of the objectives of the development plan;

Comments:

- Discussion of implementation present
- Includes:

o Historic features: p 16

Natural resources (wildlife and habitat, water resources): 30

Land use: p 112Housing: p 47

o Transportation: p 64

o Community facilities including schools, energy and communication facilities: p 98

Recreation: p 98Economy: p107

Choose an item.

Pages: 16, 30, 112, 47, 112, 47, 64, 98, 107

(8) A statement indicating how the plan relates to development trends and plans of adjacent municipalities, areas and the region developed under this title;

Choose an item. Pages: 56, 62, 56-66

Comments:

- Chapter 7 (p 56) explains importance of US Route 2 as regional corridor
- Discussion throughout Transportation chapter (page 56 to 66) of considering local land use and transportation decisions in context of regional transportation network
- Page 62 includes discussion of Cross Vermont Trail (CVTA) as alternative transportation method and connection to trail sections throughout Plainfield/Marshfield and beyond
- (9) An energy plan, including an analysis of energy resources, needs, scarcities, costs and problems within the municipality, a statement of policy on the conservation of energy, including programs, such as thermal integrity standards for buildings, to implement that policy, a statement of policy on the development of renewable energy resources, a statement of policy on patterns and densities of land use likely to result in conservation of energy;

Choose an item. Pages: 49 -55, 142 to 194

Comments:

- Plan includes energy section (Chapter 6), which discusses thermal energy, transportation, electricity, energy efficiency
- Enhanced energy plan in Appendix A.3

If a municipality is seeking a *Determination of Energy Compliance* under Act 174, see standards contained within RPC PUC Municipal Determination Standards checklist.

(10) A housing element that shall include a recommended program for addressing low and moderate income persons' housing needs as identified by the regional planning commission pursuant to subdivision 4348a(a)(9) of this title. The program should account for permitted accessory dwelling units, as defined in subdivision 4412(1)(E) of this title, which provide affordable housing.

Choose an item. Pages: 45-48, 120, 121, 122

In addition to the housing requirement above, municipalities are also required to meet the following requirement from the *Central Vermont Regional Plan 2016*, Adopted June 12, 2018:

The Regional Housing Distribution Plan is intended to be used by municipalities when updating their land use plans and regulations.

- Town Plans adopted after January 1, 2009 are expected to incorporate this Housing Distribution Plan into their town plan housing element.
- The Regional Planning Commission has established a town-by-town housing distribution plan at least 15 years into the future. The formula and allocation will be reviewed and updated with each Regional Plan's five year update.
- Town plans shall contain a detailed map or maps of the town showing the town's preferred locations for future housing units consistent with current or proposed zoning* for 80 percent of the anticipated 10 to 15 year housing demand. ("Demand" is the difference between the number of units at the time of town plan approval and the Housing Distribution number at least 10 years thereafter.)
- Town plans shall also provide mapping updates that identify the locations and number of housing units created in the town since the previous town plan adoption.
- Towns and cities are required to demonstrate the community's intent to meet the proposed housing unit numbers laid out in the Housing Distribution

Plan or to describe in detail the obstacles that make attainment impossible. CVRPC will consider the planning effort to encourage housing development in relation to the Housing Distribution Plan when approving a municipal plan.

Comments:

- Housing chapter discusses affordable housing concerns (12% of renters are rent burdened), challenges for senior citizens seeking affordable and manageable housing, barriers to entry for new homeowners, and potential for opportunities for development of low and moderate income housing (VHFA and Downstreet as potential resources)
- Housing chapter discusses accessory dwellings and increased interest in temporary dwellings such as yurts, mobile homes, and tiny houses
- Chapter discusses Mad River Valley Housing Coalition as an affordable housing partner in the area who can assist in the provision of this service.
- Figure A-3 (page 120) shows types of households in Plainfield
- Figure A-4 (page 121) shows household units by occupancy over time
- Figure A-5 (page 122) shows household units by value over time

(11) An economic development element that describes present economic conditions and the location, type, and scale of desired economic development, and identifies policies, projects, and programs necessary to foster economic growth.

Choose an item.

Pages: 102-107, 123, 124, 125

Comments:

- Chapter 9 holds the economic development plan.
- Outlines mission, priority businesses for area, and objectives of economic development in Plainfield.

- Largest employers are Goddard College and Health Center, employment opportunities are primarily small businesses, self-employment, and commuting to work
- Provides info on annual average wages on pg. 103
- Figure A-6 (page 123) shows average annual household income over time
- Figure A-7 (page 124) shows occupational fields of residents over time
- Figure A-8 (page 125) shows industries of employment over time
- P 104 discusses efforts to connect upper and lower villages with new Route 2 pedestrian bridge as opportunity for smaller retail and service businesses to continue
- P 105 discusses restoration of Plainfield Opera House as economic development opportunity to draw people into village for events with trickle down effects on retail and hospitality businesses
- P 105 discusses "Revitalizing All Marshfield and Plainfield" project and focus on Route 2 intersection and working to create "hitching posts"

(12)(A) A flood resilience plan that:

- (i) identifies flood hazard and fluvial erosion hazard areas, based on river corridor maps provided by the Secretary of Natural Resources pursuant to 10 V.S.A. § 1428(a) or maps recommended by the Secretary, and designates those areas to be protected, including floodplains, river corridors, land adjacent to streams, wetlands, and upland forests, to reduce the risk of flood damage to infrastructure and improved property; and
- (ii) recommends policies and strategies to protect the areas identified and designated under subdivision (12)(A)(i) of this subsection and to mitigate risks to public safety, critical infrastructure, historic structures, and municipal investments.
- (B) A flood resilience plan may reference an existing local hazard mitigation plan approved under 44 C.F.R. § 201.6.

Comments:

- Section 3.6 provides overview of floodplains and river corridors
- Section 4.5 discusses storm water runoff and management (p
- Section 4.1 to Section 4.4 provides overview of flood resilience planning and formation of Hazard Mitigation Committee, past flooding/erosion events, and flood hazard regulations and considerations, and references existing LHMP
- Discusses Brook Rd Bridge replacement work and projects to stem erosion and sediment issues on the Winooski River
- Wetlands discussed in section 3.6 (page 27).
- Goals in Climate Resilience chapter includes several strategies to reduce/eliminate long-term risk to human life and property from flooding/fluvial erosion

(b) The maps called for by this section may be incorporated on one or more maps, and may be referred to in each separate statement called for by this section.

Choose an item. Pages: 26 to 27, 36-44

- (c) Where appropriate, and to further the purposes of subsection 4302(b) of this title, a municipal plan shall be based upon inventories, studies, and analyses of current trends and shall consider the probable social and economic consequences of the proposed plan. Such studies may consider or contain, but not be limited to:
 - (1) population characteristics and distribution, including income and employment;
 - (2) the existing and projected housing needs by amount, type, and location for all economic groups within the municipality and the region;
 - (3) existing and estimated patterns and rates of growth in the various land use classifications, and desired patterns and rates of growth in terms of the community's ability to finance and provide public facilities and services.

GOALS AND STANDARDS OF REVIEW

GOALS

24 VSA § 4302

- (a) General purposes . . .
- (b) It is also the intent of the legislature that municipalities, regional planning commissions and state agencies shall engage in a continuing planning process that will further the following goals:
 - (1) To establish a coordinated, comprehensive planning process and policy framework to guide decisions by municipalities, regional planning commissions, and state agencies.
 - (2) To encourage citizen participation at all levels of the planning process, and to assure that decisions shall be made at the most local level possible commensurate with their impact.
 - (3) To consider the use of resources and the consequences of growth and development for the region and the state, as well as the community in which it takes place.
 - (4) To encourage and assist municipalities to work creatively together to develop and implement plans.
- (c) In addition, this chapter shall be used to further the following specific goals:

Goal 1:

To plan development so as to maintain the historic settlement pattern of compact village and urban centers separated by rural countryside.

Choose an item.

Pages: 98, 105-106, 110-111

- (A) Intensive residential development should be encouraged primarily in areas related to community centers, and strip development along highways should be discouraged.
- (B) Economic growth should be encouraged in locally designated growth areas, or employed to revitalize existing village and urban centers, or both.
- (C) Public investments, including construction or expansion of infrastructure, should reinforce the general character and planned growth patterns of the area.
- (D) Development should be undertaken in accordance with smart growth principles as defined in subdivision 2791(13) of this title.

How has the Town Plan addressed this goal:

- A. Future Land use encourages concentrated rural development to maintain rural nature of Plainfield landscape, respecting capacity of land and historic patterns of development and make use of existing infrastructure Town
- B. Plan recognizes US Route 2 corridor as important to future commercial development.
- C. Notes that wastewater plant includes reserve plant capacity to be available for new connections or expansions each year for 20 years, Goal in Community Facilities section to maintain and upgrade water and wastewater system to achieve sustainable growth in the Village
- D. Many references throughout plan (planning for sufficient growth and locating new housing in a way that minimizes negative impacts) and in the chapter to smart growth principles.

If the goal is not relevant or attainable, how does the plan address why:

Goal 2:

To provide a strong and diverse economy that provides satisfying and rewarding job opportunities and that maintains high environmental standards, and to expand economic opportunities in areas with high unemployment or low per capita incomes.

Choose an item. Pages: 104, 106, 107

How has the Town Plan addressed this goal:

- Promotes connection of upper and lower villages via new Route 2 pedestrian bridge and restoration of Opera House as economic development opportunity
- Goal to promote attractive, vibrant Village and Town with mix of businesses
- Emphasizes importance of regional economic initiatives ("Revitalizing all of Marshfield and Plainfield" project)

If the goal is not relevant or attainable, how does the plan address why:

Goal 3:

To broaden access to educational and vocational training opportunities sufficient to ensure the full realization of the abilities of all Vermonters.

Choose an item. Pages: 89

How has the Town Plan addressed this goal:

- Community Facilities chapter discusses this goal.
- Schools section of Community Facilities' chapter (Section 8.4) provides overview of Town's educational opportunities, including Goddard College

If the goal is not relevant or attainable, how does the plan address why:

Goal 4:

To provide for safe, convenient, economic and energy efficient transportation systems that respect the integrity of the natural environment, including public transit options and paths for pedestrians and bicyclers.

Choose an item. Pages: 57, 59, 61- 63, 64

(A) Highways, air, rail and other means of transportation should be mutually supportive, balanced and integrated.

How has the Town Plan addressed this goal:

- Plan has recommendations for improving and promoting public transportation, ridesharing, and bike/ped improvements including construction of Pedestrian Bridge, further enhancing Cross Vermont Trail network, and increasing public parking access in the lower village
- Goal to promote alternative modes of transportation to minimize fuel consumption,
 transportation costs, and pollution as well as protect scenic and rural character of Plainfield

If the goal is not relevant or attainable, how does the plan address why:

Goal 5:

To identify, protect and preserve important natural and historic features of the Vermont landscape including:

- (A) significant natural and fragile areas;
- (B) outstanding water resources, including lakes, rivers, aquifers, shorelands and wetlands;
- (C) significant scenic roads, waterways and views;
- (D) important historic structures, sites, or districts, archaeological sites and archaeologically sensitive areas

Choose an item.

Pages: 12-13, 16-17, 19-20, 20-21, 23-25, 25-26, 27, 28

How has the Town Plan addressed this goal:

- A. Natural and fragile areas and ecological inventory discussed in Chapter 3- sec. 3.1 (19-20). Descriptions of topography, slope, soil type, earth resources (p 20-21) forest land and habitat (pg 23-25).
- B. Groundwater discussed on p. 26 and surface waters on p. 25-26
- C. Scenic vistas discussed on p. 28. Waterways mentioned on p. 27.
- D. Historic structures and sites, districts discussed on p. 12-13, 16-17.

If the goal is not relevant or attainable, how does the plan address why:

Goal 6:

To maintain and improve the quality of air, water, wildlife and land resources.

- (A) Vermont's air, water, wildlife, mineral, and land resources should be planned for use and development according to the principles set forth in 10 V.S.A. § 6086(a).
- (B) Vermont's water quality should be maintained and improved according to the policies and actions developed in the basin plans established by the Secretary of Natural Resources under 10 V.S.A. § 1253.
- (C) Vermont's forestlands should be managed so as to maintain and improve forest blocks and habitat connectors

Choose an item. Pages: 23-25, 25-26, 29, 29-30

How has the Town Plan addressed this goal:

- A. Air quality on p.29, wildlife discussed on p. 28, mineral resources discussed on p.29-30, and land resources discussed on p. 23-25. Water quality is discussed on p. 26 (groundwater) and p. 25-26 (surface waters).
- B. Forest and habitat discussed on p. 23-25.

If the goal is not relevant or attainable, how does the plan address why:

Goal 7:

To encourage the efficient use of energy and the development of renewable energy resources.

(A) General strategies for achieving these goals include increasing the energy efficiency of new and existing buildings; identifying areas suitable for renewable energy generation; encouraging the use and development of renewable or lower emission energy sources for electricity, heat, and transportation; and reducing transportation energy demand and single occupancy vehicle use.

Choose an item. Pages: 49-55, 142-186

(B) Specific strategies and recommendations for achieving these goals are identified in the State energy plans prepared under 30 V.S.A. §§ 202 and 202b

How has the Town Plan addressed this goal:

- Plan includes energy section (Chapter 6), which discusses thermal energy, transportation, electricity, energy efficiency
- Enhanced energy plan in Appendix A.3

If the goal is not relevant or attainable, how does the plan address why:

Goal 8:

To maintain and enhance recreational opportunities for Vermont residents and visitors.

- Choose an item. Pages: 32, 86-87
- (A) Growth should not significantly diminish the value and availability of outdoor recreational activities.
- (B) Public access to noncommercial outdoor recreational opportunities, such as lakes and hiking trails, should be identified, provided, and protected wherever appropriate.

How has the Town Plan addressed this goal:

- Section 8.3 discusses recreation including recreational assets including publicly owned land, forest, and facilities.
- Goal 3 of Chapter 3 to promote responsible recreational use of Plainfield's natural resources for health and wellbeing of its residents

If the goal is not relevant or attainable, how does the plan address why:

Goal 9:

To encourage and strengthen agricultural and forest industries.

- (A) Strategies to protect long-term viability of agricultural and forest lands should be encouraged and should include maintaining low overall density.
- (B) The manufacture and marketing of value added agricultural and forest products should be encouraged.
- (C) The use of locally-grown food products should be encouraged.

Choose an item.

Pages: 23, 23-25, 30, 31, 32

- (D) Sound forest and agricultural management practices should be encouraged.
- (E) Public investment should be planned so as to minimize development pressure on agricultural and forest land.

How has the Town Plan addressed this goal:

- A. Plan mentions tools to protect/enhance landscape including current use program (p 23). Section 3.3 and Section 3.4 discuss importance of maintaining and protecting intact, contiguous forest blocks and habitat connectivity
- B. Page 22 (Agricultural Soils) discusses growth in agricultural enterprises since previous town plan,
- C. See above.
- D. See discussion of forest management and ag on p. 22-25.
- E. Goal 1 (p30), Goal 2(p31), goal 4 (p 32) encourages Town support to help landowners find opportunities to manage large contiguous parcels, promote Current Use program, etc.

If the goal is not relevant or attainable, how does the plan address why:

Goal 10:

To provide for the wise and efficient use of Vermont's natural resources and to facilitate the appropriate extraction of earth resources and the proper restoration and preservation of the aesthetic qualities of the area.

Choose an item. Pages: 29-30

How has the Town Plan addressed this goal:

Section 3.9 (p29), mentions 1 operating stone extraction business. Section states extraction of
gravel and stone should be conducted in manner that minimizes potential conflicts with
properties in the vicinity, avoids adverse impacts to ground/surface water quality, and includes
a plan for site restoration

If the goal is not relevant or attainable, how does the plan address why:

Goal 11:

To ensure the availability of safe and affordable housing for all Vermonters.

- (A) Housing should be encouraged to meet the needs of a diversity of social and income groups in each Vermont community, particularly for those citizens of low and moderate income.
- (B) New and rehabilitated housing should be safe, sanitary, located conveniently to employment and commercial centers,

Choose an item. Pages: 46

and coordinated with the provision of necessary public facilities and utilities.

- (C) Sites for multi-family and manufactured housing should readily available in locations similar to those generally used for single-family conventional dwellings.
- (D) Accessory apartments within or attached to single family residences which provide affordable housing in close proximity to cost-effective care and supervision for relatives or disabled or elderly persons should be allowed.

How has the Town Plan addressed this goal:

- A. Plan discusses need for housing of all types, especially affordable housing and housing for elderly/disabled (p46)
- B. P. 46, Town to explore opportunities for low and moderate income housing, consider creation of growth centers with high density and affordable housing.
- C. P.46 states Plainfield should review zoning regulations regarding mobile home sand tiny houses that may offer ways to overcome barriers to ownership and allow for lower-cost housing
- D. Accessory apartments discussed on p. 46

If the goal is not relevant or attainable, how does the plan address why:

Goal 12:

To plan for, finance and provide an efficient system of public facilities and services to meet future needs.

- (A) Public facilities and services should include fire and police protection, emergency medical services, schools, water supply and sewage and solid waste disposal.
- (B) The rate of growth should not exceed the ability of the community and the area to provide facilities and services.

Choose an item. Pages: 76-86

How has the Town Plan addressed this goal:

• Public facilities (water, wastewater, solid waste, fire rescue, police, and emergency shelters) discussed on p 76-86. Town has capacity for more development.

If the goal is not relevant or attainable, how does the plan address why:

Goal 13:

To ensure the availability of safe and affordable child care and to integrate child care issues into the planning process, including child care financing, infrastructure, business assistance for child care providers, and child care work force development.

Choose an item. Pages: 93-94

How has the Town Plan addressed this goal:

 Town includes list of 6 child care providers, also mentions Twinfield Learning Center and Twinfield School that provides after-school childcare

If the goal is not relevant or attainable, how does the plan address why:

Goal 14:

To encourage flood resilient communities.

- (A) New development in identified flood hazard, fluvial erosion, and river corridor protection areas should be avoided. If new development is to be built in such areas, it should not exacerbate flooding and fluvial erosion.
- (B) The protection and restoration of floodplains and upland forested areas that attenuate and moderate flooding and fluvial erosion should be encouraged.
- (C) Flood emergency preparedness and response planning should be encouraged.

Choose an item.

Pages: 26-27, 34, 41, 43, 98

How has the Town Plan addressed this goal:

- A. Ch. 4 Climate, Resilience, and Mitigation discusses restrictions on new development and flood hazard regulations P 27. Floodplains and River Corridors section (p 27) discusses controlling development in compliance with flood hazard regulations. Strategy on p 34 to review and amend zoning regulations to ensure riparian buffer strips alongside streams are maintained and structures are not built in areas subject to flooding and fluvial erosion
- B. Riparian Areas (p 26-27) discusses importance of protecting riparian areas and identifies need for riparian plantings along Great Brook, Ecological Inventory identifies additional locations for planting. Strategy on p 43 to purchase 25 foot buffer along Great Brook
- C. LHMP mentioned on p. 41, as well as LEMP on p. 98

If the goal is not relevant or attainable, how does the plan address why:

STANDARD OF REVIEW

24 V.S.A. § 4302(f)

- (1) As used in this chapter, "consistent with the goals" requires substantial progress toward attainment of the goals established in this section, unless the planning body determines that a particular goal is not relevant or attainable. If such a determination is made, the planning body shall identify the goal in the plan and describe the situation, explain why the goal is not relevant or attainable, and indicate what measures should be taken to mitigate any adverse effects of not making substantial progress toward that goal. The determination of relevance or attainability shall be subject to review as part of a consistency determination under this chapter.
- (2) As used in this chapter, for one plan to be "compatible with" another, the plan in question, as implemented, will not significantly reduce the desired effect of the implementation of the other plan. If a plan, as implemented, will significantly reduce the desired effect of the other plan, the plan may be considered compatible if it includes the following:
 - (A) a statement that identifies the ways that it will significantly reduce the desired effect of the other plan;
 - (B) an explanation of why any incompatible portion of the plan in question is essential to the desired effect of the plan as a whole;
 - (C) an explanation of why, with respect to any incompatible portion of the plan in question, there is no reasonable alternative way to achieve the desired effect of the plan, and
 - (D) an explanation of how any incompatible portion of the plan in question has been structured to mitigate its detrimental effects on the implementation of the other plan.

24 V.S.A. § 4350. Review and consultation regarding municipal planning effort

- (a) A regional planning commission shall consult with its municipalities with respect to the municipalities' planning efforts, ascertaining the municipalities' needs as individual municipalities and as neighbors in a region, and identifying the assistance that ought to be provided by the regional planning commission. As a part of this consultation, the regional planning commission, after public notice, shall review the planning process of its member municipalities at least twice during an eight-year period, or more frequently on request of the municipality, and shall so confirm when a municipality:
 - (1) is engaged in a continuing planning process that, within a reasonable time, will result in a plan which is consistent with the goals contained in section 4302 of this title; and
 - (2) is maintaining its efforts to provide local funds for municipal and regional planning purposes.
- (b)(1) As part of the consultation process, the commission shall consider whether a municipality has adopted a plan. In order to obtain or retain confirmation of the planning process after January 1, 1996, a municipality must have an approved plan. A regional planning commission shall review and approve

plans of its member municipalities, when approval is requested and warranted. Each review shall include a public hearing which is noticed at least 15 days in advance by posting in the office of the municipal clerk and at least one public place within the municipality and by publication in a newspaper or newspapers of general publication in the region affected. The commission shall approve a plan if it finds that the plan:

- (A) is consistent with the goals established in section 4302 of this title;
- (B) is compatible with its regional plan;
- (C) is compatible with approved plans of other municipalities in the region; and
- (D) contains all the elements included in subdivisions 4382(a)(1)-(10) of this title.

The following are procedures for Regional Planning Commission review of town plans. The first procedure pertains to review of town plan re-adoptions and town plan amendments. The second is an alternate procedure for review of town plan amendments. For review of amendments, it is up to the discretion of the Regional Planning Commission as to which procedure will be used.

Town Plan Review & Approval Process The following may be used for town plan re-adoption reviews as well as town plan amendment reviews

- 1. The regional planning commission (RPC) receives a request for town plan approval.
- 2. If the staff review reveals a flaw that would preclude RPC approval, the town will be notified. It is the town's option as to whether they want a final decision on the plan or if the plan should be withdrawn from the approval process.
- 3. Staff comments, including draft findings and recommendations, will be provided to the committee or board given responsibility by the RPC's bylaws for town plan approval.
- 4. The RPC's public hearing will be held before the RPC makes its final decision on the plan.
- 5. In all cases the RPC will take final action on the plan approval request within 60 days of its receipt.

Town Plan Amendment Review Process This is an alternative procedure for town plan amendment reviews

- 1. The regional planning commission (RPC) receives a request to review an amendment to the town plan.
- 2. Staff comments, including draft findings and recommendations, will be provided to the committee or board given responsibility by the RPC's bylaws for town plan approval.
- 3. The town will be notified whether or not the amendment may be approved within the context of the current regional approval of the town plan, or if the amendment constitutes a material change to the plan that is beyond the scope of the current regional approval.

4. If the amendment constitutes a change to the plan that is beyond the scope of the current regional approval, the town will be given the option of submitting the amended plan for regional approval.



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:		☐ 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.		
	Please submit these plans to your RPC	After July 1, 2018, this option ceases to exist.		
Applicant:	Plainfield			
Contact person:	Bob Atchinson (Energy Coordinator)			
Contact information:	bobattwo@gmail.com			
Received by: Zachary Maia	Date: 4/12/21			

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.

1. Has your plan been duly adopted and approved for confirmation according to 24 V.S.A. § 4350?	✓ Yes. Adoption date:4/12/21Confirmation date:Click here to enter text.	□ No	Click here to enter text.
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?	⊠ Yes	□ No	Notes: Click here to enter text.

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 <u>analysis of resources</u>, <u>needs</u>, <u>scarcities</u>, <u>costs</u>, <u>and problems within the region across</u> all energy sectors, including electric, thermal, and transportation; a statement of policy on the conservation and efficient use of <u>energy and the development and siting of renewable energy resources</u>; a statement of policy on patterns and densities of land <u>use likely to result in conservation of energy</u>; and an identification of potential areas for the development and siting of <u>renewable energy resources</u> 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.

to the extense and checkly deciment to decide to comprehensively address on	5.61, 100.10	a a. a. a. a. a. a	promontally to and received outlier relevant plan elements.
3. Does the plan contain an energy element, that contains the same	⊠ Yes	□ No	Page: Chapter 6 (Energy), Appendix A.3 (Enhanced
components described in 24 V.S.A. § 4348a(a)(3)?			Energy Plan)
Individual components of the energy element will be evaluated through the			Notes: Chapter discusses thermal, transportation and
standards below.			electricity energy sources and usage as well as
			background on energy committee work in Plainfield.
			First section of Appendix energy plan gives further
			background on energy usage in Plainfield across
			transportation, thermal, and electric sectors.

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.

4. Does your plan's energy element contain an analysis of resources, needs,	⊠ Yes	□ No	Page: Energy section and Section A.3.2 of
scarcities, costs, and problems within the municipality across all energy sectors			Enhanced Energy Plan
(electric, thermal, transportation)?			Notes: Click here to enter text.
5. Does your plan contain an analysis that addresses A-E below, either as provided	⊠ Yes-	□ No	Page: 147-163
by your Regional Planning Commission or as developed by your municipality?	Region		Paragraph #: Click here to enter text.

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 & 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.	⊠ Yes- Custom		Notes: Click here to enter text.
A. Does the plan estimate current energy use across transportation, heating, and electric sectors?	⊠ Yes	□ No	Page: 147-150 Paragraph #: 1. Estimates of current energy use across transportation, heating, and electric sectors. Notes: Click here to enter text.
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?	⊠ Yes	□ No	Page: 150-153 Paragraph #: 2. 2025, 2035, and 2050 targets for thermal and electric efficiency improvements, and use of renewable energy for transportation, heating, and electricity. Notes: Click here to enter text.
C. Does the plan evaluate the amount of thermal-sector conservation, efficiency, and conversion to alternative heating fuels needed to achieve these targets?	⊠ Yes	□ No	Page: 153-154 Paragraph #: 3.Evaluation of the amount of thermal sector conservation, efficiency, and conversion to alternative heating fuels needed to achieve these targets Notes: Click here to enter text.
D. Does the plan evaluate transportation system changes and land use strategies needed to achieve these targets?	⊠ Yes	□ No	Page: 154-155 Paragraph #: 4. Evaluation of transportation system changes and land use strategies needed to achieve these goals. Notes: Click here to enter text.
E. Does the plan evaluate electric-sector conservation and efficiency needed to achieve these targets?	⊠ Yes	□ No	Page: 156-158 Paragraph #: 5. Evaluation of electric sector conservation and efficiency needed to achieve these targets. 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.

	es your plan's energy element contain a statement of policy on the rvation and efficient use of energy?	⊠ Yes	□ No	Page: 165-168 Paragraph #: Section A. Conservation and Efficiency Notes: Click here to enter text.
A.	Does the plan encourage conservation by individuals and organizations? (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.)	⊠ Yes	□ No	Page: 165 Paragraph #: Objective A-1: Increase Conservation of Energy by Individuals and Organizations Notes: Pathways include inventorying interested residents, distributing information and holding meetings, and sustaining Energy Committee outreach.
В.	Does the plan promote efficient buildings? (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	⊠ Yes	□ No	Page: 166 Paragraph #: Objective A-2: Promote energy efficiency in the design, construction, renovation, operation, location and

efficiency ratings and labeling; considering adoption of stretch codes, etc.)			retrofitting of systems for buildings and structures Notes: Pathways include revisions to zoning, provision of information regarding residential and commercial building standards to contractors, and integrating energy data into municipal documents (annual reports, ex)
C. Does the plan promote decreased use of fossil fuels for heating? (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)	⊠ Yes	□ No	Page: 167 Paragraph #: Objective A-3: Identify ways to decrease the use of fossil fuels for heating. Notes: Pathways include holding workshops with efficiency groups on fuel-switching, information is provided to residents on options, and preventing further development of new fossil fuel infrastructure in Plainfield, and holding meetings to discuss carbon tax and tax on local fuels.
D. Does the plan demonstrate the municipality's leadership by example with respect to the efficiency of municipal buildings? (Actions could include building audits and weatherization projects in schools and town offices, etc.)	⊠ Yes	□ No □ N/A	Page: 168 Paragraph #: Objective A-3: Demonstrated municipal leadership by example regarding efficiency of municipal buildings Notes: Municipality will lead by example by weatherizing municipal buildings, and increasing municipal solar production/use., working to transition wastewater treatment facility to renewable energy
E. Other (please use the notes section to describe additional approaches that your municipality is taking)	☐ Yes	□ No ⊠ N/A	Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: Click here to enter text.
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?	⊠ Yes	□ No	Page: 169-173 Paragraph #: Section B: Reducing Transportation Demand, Single Occupancy Vehicle Use, and Encouraging Renewable or Lower-Emission Energy Sources for Transportation

				Notes: Click here to enter text.
A.	Does the plan encourage increased use of public transit? (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.)	☐ Yes	□ No □ N/A	Page: 169 Paragraph #: Objective B-1: Encourage increased use of transit as a primary method to complete daily trips and reduce demands on existing infrastructure such as roads and parking Notes: Pathways include partnering with neighboring municipalities (inventory of public opinion) to expand usage of public transit and community presentations with GMT on public transit systems
В.	Does the plan promote a shift away from single-occupancy vehicle trips, through strategies appropriate to the municipality? (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.)	⊠ Yes	□ No	Page: 170 Paragraph #: Objective B-2: Promote the shift away from single-occupancy vehicle trips to reduce congestion, impacts to local facilities, and support alternative options for transportation needs Notes: Pathways include assessing internet service that may present barriers to telecommuting, as well as promoting the Go! Vermont webpage.
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? (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.)	⊠ Yes	□ No	Page: 171 Paragraph #: Objective B-3: Promote the shift away from gas/ diesel vehicles to electric or non-fossil fuel transportation options to reduce dependency on non-renewable fuel sources for transportation Notes: Pathways include partnerships with Drive Electric VT, Waterbury LEAP to hold events, work on priority parking for EVs and fuel efficient vehicles in village, and explore fuel switching for school buses.
D.	Does the plan facilitate the development of walking and biking infrastructure through strategies appropriate to the municipality?	⊠ Yes	□ No	Page: 172

(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.)		□ N/A	Paragraph #: Objective B-4: Facilitate the development of walking and biking infrastructure to provide alternative transportation options for the community Notes: Pathways include updating road standards to include complete street principles, partnering with Marshfield to identify safe alternative transportation between Village Centers, and partnering with VDH to apply for active transportation projects
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.)	⊠ Yes	□ No □ N/A	Page: 173 Paragraph #: Objective B-5 – Demonstrated municipal leadership with respect to efficiency of municipal transportation to show an on-going commitment on behalf of the Town of Plainfield. Notes: Pathways include installing EV charging stations on municipal lots, replacing municipal vechiles with EV or high efficiency vehicles, and revising municipal policies to permit telecommuting
F. Other (please use the notes section to describe additional approaches that your municipality is taking)	☐ Yes	□ No 図 N/A	Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: Click here to enter text.
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?	☐ Yes	□ No	Page: 174 Paragraph #: Section C – Patterns and Densities of Land Use Likely to Result in Conservation of Energy Notes: Click here to enter text.
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	☐ Yes	□ No	Page: 174 Paragraph #: Objective C-1 – The Town of Plainfield is committed to reducing sprawl and minimizing low density development by encouraging density in areas where

	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.)			infrastructure exists or is planned to support growth. Notes: Pathway is modifying zoning to encourage development in existing areas (density based zoning)
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.)	⊠ Yes	□ No □ N/A	Page: 174 Paragraph #: Objective C-2 – Strongly prioritize development in compact, mixed use centers when feasible and appropriate and identify ways to make compact development more feasible throughout the town of Plainfield. Notes: Pathways include revising development regulations and municipal policies to limit water and wastewater services to centralized Town areas, and cionsidering revision of 2004 subdivision regulations to encourage compact development
C.	Other (please use the notes section to describe additional approaches that	☐ Yes	□ No	Page: Click here to enter text.
	your municipality is taking)		⊠ N/A	Paragraph #: Click here to enter text. Notes: Click here to enter text.
	s your plan's energy element contain a statement of policy on the policy on the pment and siting of renewable energy resources?	⊠ Yes	□ No	Notes: Section D – Development and Siting of Renewable Energy Resources
A.	Does the plan evaluate (estimates of or actual) generation from existing renewable energy generation in the municipality? Municipalities should be able to obtain this information from their regions.	⊠ Yes	□ No	Page: 175 Paragraph #: Objective D-1: Evaluate generation from existing renewable energy generation including the identification of constraints, resource areas, and existing infrastructure by energy type. Notes: Pathways include creating online database of energy generation information, analyzing generation sources to identify conditions for success, and conducting public interest survey on solar array at park and ride
B.	Does the plan analyze generation potential, through the mapping exercise	⊠ Yes	□ No	Page: 176

	(see <i>Mapping</i> standards, below), to determine potential from preferred and potentially suitable areas in the municipality? Municipalities should be able to obtain this information from their regions.			Paragraph #: Objective D-2 – Evaluate generation from potential renewable energy generation including the identification of constraints, resource areas, and existing infrastructure by energy type Notes: Pathways include holding meetings to identify preferred sites and discussing constraints
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 <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? If N/A, please describe how you are working with your regional planning commission to ensure overall regional objectives are achieved.	⊠ Yes	□ No □ N/A	Page: 160 Paragraph #: Siting Section Notes: Identifies sufficient land for renewable energy development and recognition of possible barriers to development including
D.	Does the plan ensure that any local constraints (locally designated resources or critical resources, from12B 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? If N/A, please describe how you are working with your regional planning commission to ensure overall regional objectives are achieved.	⊠ Yes	□ No □ N/A	Page: 180 Paragraph #: Section A.3.4, Paragraph Preferred and Unsuitable Siting Locations Notes: Only local constraint identified was the Reserve Lands District, but this area is unsuitable for large scale renewable energy development including wind, solar, and biomass.
	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)?	⊠ Yes	□ No	Page: 180 Paragraph #: Section A.3.4, Paragraph Preferred and Unsuitable Siting Locations Notes: No preferred or potential sites have been identified by the Town. Unsuitable sites include the Reserve Lands district, which is explained in the Land Use chapter
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)?	☐ Yes	□ No 図 N/A	Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: No locations identified as preferred.
G.	Does the plan demonstrate the municipality's leadership by example with	⊠ Yes	□ No	Page: 152

respect to the deployment of renewable energy?		□ N/A	Paragraph #: Energy Committee section			
(Actions could include deploying renewable energy to offset municipal			Notes: Energy Committee worked with State			
electric use, etc.)			to get solar array on Park and Ride lot. Also			
			installed an electric vehicle charging station			
	 		on lot in the village.			
H. Other (please use the notes section to describe additional approaches that	☐ Yes	□ No	Page: Click here to enter text.			
your municipality is taking)		⊠ N/A	Paragraph #: Click here to enter text.			
	<u> </u>		Notes: Click here to enter text.			
Manning Ctane	darda					
Mapping Stand						
Act 174 requires plans to identify potential areas for the development and siting of re						
resources or particular categories or sizes of those resources. It furthermore requires	that the st	andards ad	dress the potential generation from the potential			
siting areas.						
The <i>Mapping</i> standards lay out a sequence of steps for planners to examine existing r						
renewable energy development, and to identify likely unsuitable areas for development		_				
map layers. The maps should help municipalities visualize and calculate the potential	~	•				
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 provide						
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 we	ell as the te	ext describi	ng 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						

⊠ Yes-

☐ No

Page: Click here to enter text.

the area in which a project is proposed.

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? 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.	Region Yes- Custom		Paragraph #: Click here to enter text. Notes: Click here to enter text.
11. Does the plan identify and map existing electric generation sources? 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.	⊠ Yes	□ No □ N/A	Page: 188 Paragraph #: Click here to enter text. Notes: Click here to enter text.
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? Maps should include the following (available from VCGI and ANR), and the resulting Prime and Secondary Resource Maps will together comprise "potential areas":		□ No	Page: Paragraph #: Click here to enter text. Notes:
A. Raw renewable energy potential analysis (wind and solar), using best available data layers (including LiDAR as appropriate)	⊠ Yes	□ No	Page: 189, 192, 193, 194 Paragraph #: Notes: Hydro, solar, wind, and biomass resource maps provided
 B. Known constraints (signals likely, though not absolute, unsuitability for development based on statewide or local regulations or designated critical resources) to include: 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 If areas are constrained for the development of renewable 	⊠ Yes	□ No	Page: 190 Paragraph #: Click here to enter text. Notes: Click here to enter text.

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 be similarly restrictive; for this category, policies must prohibit all permanent development (and should be listed in the Notes column). These areas should be subtracted from raw renewable energy resource potential maps to form Secondary Resource Maps			
 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: 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 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). These areas should be subtracted from Secondary Resource Maps to form Prime Resource Maps. 	∀es	□ No	Page: 191 Paragraph #: Click here to enter text. Notes: Click here to enter text.
D. Transmission and distribution resources and constraints, as well as transportation infrastructure.	⊠ Yes	□ No	Page: 189, 192, 193, 194 Paragraph #: Click here to enter text.

(Including three-phase distribution li resources such as Green Mountain P of high electric load, etc.)				Notes: Click here to enter text.
E. Preferred locations (specific areas of or a specific size or type of generator siting criteria for these locations Narrative descriptions of the types of accompanying plan text are acceptated and especially specific parcels (to the encouraged, to signal preferences to locally preferred areas and specific pastatewide preferred location under in The locations identified as preferred developing a technology with regard renewable resource and access to the infrastructure.	or, accompanied by any specific of preferred areas in able, though mapping of areas are extent they are known) is highly of developers, particularly for parcels that do not qualify as a below. The must not be impractical for all to the presence of the	□ Yes	□ No ⊠ N/A	Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: Click here to enter text.
 i. Statewide preferred locations su structures), parking lots, previou gravel pits, quarries, and Superference 	usly developed sites, brownfields,	⊠ Yes	□ No □ N/A	Page: 187 Paragraph #: Click here to enter text. Notes: Click here to enter text.
location in a duly adopted munic metering project to qualify as be	ear-site generation, economic and not currently farmed ear already developed e for large-scale biomass district an, potential locations for biogas to map if possible, as "a specific cipal plan" is one way for a net eing on a preferred site.	□ Yes	□ No ⊠ N/A	Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: No preferred locations identified
13. Does the plan identify areas that are unenergy resources or particular categoric Either Yes or No ("No" if the plan choose unsuitable) is an acceptable answer here with "generators."	es or sizes of those resources? s not to designate any areas as	∀es ("Yes" for A and B must also be selected below)	□ No	Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: Click here to enter text.
A. Are areas identified as unsuitable fo	r particular categories or sizes of	⊠ Yes	□ No	Page: 112, 180

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)? 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.		⋈ N/A (if no unsuita ble areas are identifie d)	Paragraph #: Section 10.2 and Section A.3.4, Paragraph Preferred and Unsuitable Siting Locations Notes: Plainfield's Land Use Element and Zoning discusses the Reserve Lands District as a conservation area unsuitable for most development (no dwelling units, but suitable for forestry, low-impact recreation and wildlife habitat). The area does not have great road access. Further, zoning says the area is intended to preserve the ridgelines and wildlife habitat.
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? Please explain in the Notes column.	⊠ Yes	□ No	Page: 112, 180 Paragraph #: Section 10.2 and Section A.3.4, Paragraph Preferred and Unsuitable Siting Locations Notes: See above for explaination. Reserve Lands District would not impact a majority of the renewable resource available. Further, all renewable generation would be constrained in this area.
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?	∀es (also check Yes if seeking determina tion from region, or from DPS but using region- provided maps)	□ No	Page: Click here to enter text. Paragraph #: Click here to enter text. Notes: Click here to enter text.



MEMO

Date: June 8, 2021

To: CVRPC Board of Commissioners

From: Clare Rock, Senior Planner

Re: Comments on VELCO Long Range Transportation Plan (LRTP)

ACTION REQUESTED: Approve attached letter containing comments on VELCO's LRTP

The Regional Plan Committee met on Wednesday June 2, 2021 to review the LRTP and was tasked with developing comments to submit to VELCO. Following the Committee discussion, staff was tasked with drafting a letter based upon member input. The draft letter was circulated to Committee member for final review. Attached please find:

- The draft letter for Board approval to be sent to VELCO; and
- The RPC memo containing the staff review.



June 7, 2021

Vermont Electric Power Company
Shana Louiselle, Communications and Policy Advocate
Submitted via email to slouiselle@velco.com

Re: CVRPC comments on VELCO Long Range Transmission Plan (LRTP)

Dear Ms. Louiselle,

Thank you for providing the Central Vermont Regional Planning Commission (CVRPC) the opportunity to review the draft VELCO Long Range Transmission Plan (LRTP), dated April 12, 2021. VELCO's draft plan projects the transmission system has sufficient capacity to serve forecasted demand for the next 10 years of the 20-year planning horizon and includes key takeaways and recommendations on how the grid may accommodate increased demand without the need to "string additional wires."

Central Vermont Regional Planning Commission recognizes that other alternative technologies and mitigation techniques can be and should be employed before significant investment and construction of new transmission infrastructure is to be built. The LRTP indicates that within the second half of the forecasted planning horizon the current grid does not have the capacity to optimally manage the generation of new renewal energy targets as identified in the Central Vermont Regional Plan (and as outlined in the State Comprehensive Energy Plan.) CVRPC is committed to working toward its ambitious energy targets and encourages VELCO to provide detail on what specific transmission improvements would be needed if the region and the State were to come close to attaining its renewable energy targets.

The LRTP identified the need for careful coordinated statewide planning for successful integration of future distributed generation. CVRPC strongly supports this recommendation and encourages integrative planning at the regional, state and multi state level as energy generation and usage is not only confined within our state borders.

The LRTP recommends flexible load management, storage, and curtailment as options for mitigating future system constraints. As identified by VELCO, CVRPC agrees curtailment is the least favorable option. While the Central Vermont Regional Plan doesn't explicitly address flexible load management, the Board supports this mitigation strategy with continued investment in energy efficiency and suggests VELCO emphasize the direct reliance on broadband investment to ensure smart grid integration, data accuracy and data transparency. CVRPC also requests VELCO include more information about who is responsible for implementing the technology whether that be VELCO, the utility, the developer and/or the homeowner.

CVRPC recognizes storage as an integral component of our renewal energy future and favors this mitigation option. To aid in regional planning efforts, it would be beneficial to better understand the

level of grid upgrades needed to effectively implement this recommendation along with considerations for the various types of possible storage. The LRTP acknowledges the environmental impacts associated with manufacturing this technology, and CVRPC is sensitive to negative environmental effects with sourcing raw materials from outside of the United States. Undertaking a Cost Benefit analysis would be supported by CVRPC to aid in future decision making about the various storage options weighed along with environmental impacts.

The LRTP is a technical document containing complex energy concepts. To aid volunteer planners and municipal officials in their understanding of Vermont transmission grid and its future, it would be helpful to include graphics and visuals (similar to those shared in the public meeting presentations) to help communicate the plan's takeaways. Additional inclusion of a flow chart or simple table identifying the roles of the various entities within the State's energy regulatory and planning framework would also help foster a greater understanding of how VELCO works with State agencies and utility companies.

Once again, thank you for the opportunity to review the Draft 2021 LRTP. We look forward to working with VELCO and other partners in Vermont's energy future.

Sincerely,

Bonnie Waninger, Executive Director

June 7, 2021 Page 2 of 2



MEMO

Date: May 20, 2021

To: Regional Plan Committee From: Grace Vinson, Planner

Re: Review of CVRPC staff comments on VELCO Long Range Transmission Plan (LRTP)

☒ ACTION REQUESTED: The Committee will be tasked with:

- a. Review and approve CVRPC Staff comments on Draft 2021 VELCO LRTP
- b. Propose comments on the LRTP to present to CVRPC Board of Commissioners on 6/8/21

Plan Background and Purpose

The Vermont transmission system is part of the ISO- New England (ISO-NE) regional electric grid. Vermont Electric Power Company (VELCO) participates with ISO-NE in planning and systems operations to meet mandatory reliability standards. As required by Vermont law and the Vermont Public Utility Commission, every 3 years VELCO produces a Long Range Transmission Plan (LRTP) that forecasts future electric demand, identifies where the State's electric transmission system may need future upgrades, and discusses how those needs may be met through transmission projects or other alternatives. The Draft 2021 LRTP uses a 20-year horizon, however, the main focus is the 10 year period through 2030.

The Draft 2021 LRTP was released for public comment on April 12, 2021. CVRPC has the opportunity to provide comments to VELCO on the Draft 2021 LRTP. The Regional Plan Committee is tasked with providing a recommendation to the Board of Commissioners to approve CVRPC LRTP comments and conformance finding.

Staff reviewed the Draft 2021 LRTP. Staff then prepared a draft memo to VELCO on the conformance of the LRTP to the Regional Plan. The LRTP can be found here: https://www.velco.com/our-work/planning/longrangeplan2021. Additional background on the Plan, general comments, and considerations for updating the Regional Plan are provided below.

VELCO Draft 2021 Takeaways and Recommendations

1. Peak demand $\frac{1}{2}$ is forecast to grow due to electrification of heating and transportation. The transmission system has sufficient capacity to serve this demand for the first 10 years of the 20 year planning horizon. This increase in demand is primarily driven by the growth of the electric sector (increased adoption of electric vehicles and cold climate heat pumps).

2. The electric grid is undergoing a profound transformation.

Vermont's grid is transitioning from traditional base load³ generation to more distributed⁴, small-scale renewable resources (primarily solar PV). Additionally, traditional power plants (oil, coal, and nuclear) are retiring. The plan notes that 400 MW of solar PV is currently installed in the State, with a forecast of 683 MW by 2032.

3. Thoughtful and careful planning of distributed generation is required.

As noted above, small-scale distributed generation (DG) is increasing, however currently DG projects are reviewed on a project by project basis without regard to transmission system impacts. A map on page 43 of the LRTP identifies regional boundaries and regional allocations (zonal limits) of solar PV to avoid transmission and sub transmission upgrades.

4. Storage, curtailment and Load Management can mitigate system constraints.

The LRTP identifies several options to mitigate these concerns including energy storage and load management. Location matters for large-scale storage ideally, storage should be sited close to the source of generation. Load management (adjusting/controlling supply of electricity) can also help to reduce demand during peak demand times. Load management is changing when electricity is used to reduce stress on the grid during peak periods- for example, using grid-connected smart appliances to use electricity when peak is lower, or charging EVs when peak is lower. Vermont can also elect to curtail generation, but financial and technical challenges need to be understood and addressed, and is the least preferred option.

5. Renewable electricity generation targets in State 2016 Comprehensive Energy Plan (CEP) and CVRPC Regional Plan exceed optimized solar distribution for CVRPC region in LRTP.Page 43 and 44 identify the optimal distribution for distributed generation (such as solar PV) by geographic zone, and states, "Significant transmission upgrades can be avoided by installing distributed generation without exceeding zonal limits." The map on page 43 shows that

May 26, 2021 Page 2 of 5

¹ **Demand**: amount of electricity being used at any given moment by a single customer, or by a group of customers

² **Peak demand:** highest demand occurring within a given span of time, usually a season or a year. Peak demand that a transmission or distribution system must carry sets the minimum requirement for its capacity.

³ Base Load: electric generation plant that is expected to operate in most hours of the year

⁴ **Distributed generation**: Power generation at or near the point of consumption in contrast to centralized generation that relies on transmission and distribution over longer distances to reach the load. Generally DG is smaller in scale and centralized, base load power. DG includes small-scale solar (less than 5 MW).

resources are more easily accommodated in the southern region and more difficult to accommodate in the northern regions, which are further from major transmission and closer to other large generation and energy sources.

- As shown on page 44, the CVRPC "zone" currently has **29.1 MW** of installed solar PV.
- The optimized solar PV distribution is **73.1 MW**, providing **44 MW** of additional solar PV.
- Page 212 of the CVRPC Regional Energy Plan identifies a target of 321.94 MW (418,531 MWh) of new renewable energy by 2050 to meet the renewable energy targets identified in the Comprehensive Energy Plan, exceeding the optimized distribution by 247.9 MW. It is important to note that "new renewable energy" can consist of more than just solar to include small wind, methane, and biomass, and small hydroelectric.
- At the May 11 Board of Commissioners meeting, Hantz Presume from VELCO stated "storage to absorb excess energy, manage load, curtail generation that is controllable by operators, or reinforcing the system to allow meeting these targets is necessary, and communication is needed on how to bridge the gap."
- GMP <u>has also created a map</u> to facilitate generation project siting with respect to
 available distribution capacity. This map shows most of the Central Vermont region has
 at least 20% circuit capacity. However, several towns show that "due to system
 limitations, interconnections on this circuit may experience higher costs and delayed
 interconnections."

6. Sub-system issues

The LRTP identifies 4 locations in the Montpelier area with sub-transmission potential reliability concerns (issues that cause high/low voltage, or thermal overload when equipment exceeds the rated temperature). The affected utilities (GMP/WEC) will determine what, if any, projects are required to address potential reliability issues.

Plan Conformance

CVRPC found that the Draft 2021 LRTP conforms to the following policies of the CVRPC Regional Energy Plan:

- The LRTP states, "Resilience is one of the consideration in the design of transmission facilities, which can include the location of facilities in relation to FEMA flood levels, equipment height, equipment design specifications, and redundancy".
 - This is consistent with the following Regional Energy Plan policy: "Evaluate generation from existing renewable energy generation by municipality including the identification of constraints, resource areas, and existing infrastructure by energy type."
- The LRTP states, "Storage is a solution category that includes devices or processes that store energy in one form during times of excessive energy production and later release that energy. If properly designed, operated and located, storage is helpful at minimizing system constraints caused by excess generation at certain times of the day."
 - This is consistent with the following statement in the CVRPC Regional Energy

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Plan: "limitations on renewable resource technology will impact peak needs which may create a demand for storage of electrical power. These factors will need to be considered in all our future decisions if a 90% renewable energy system is to become a reality. This may require potential changes to land use regulations that will accommodate battery or other storage options.

- The LRTP states "Careful coordinated state wide planning is required to successfully integrate future distributed generation and storage without significant grid reinforcements"
 - This is consistent with the following statement in the CVRPC Regional Energy Plan: "current transmission infrastructure [is] another component to consider when identifying where specific generation types should be located to ensure the transmission capacity exists within the grid or to identify areas where upgrades may be needed before development of renewable energy generation can occur."
 - This is consistent with the following implementation actions in Policy D-1: 1) Provide regular mapping updates to municipalities regarding existing generation facilities to maintain an up-to-date inventory of locations; 2) Provide regular mapping updates to municipalities regarding known and possible constraints to ensure consistency with state guidelines on renewable energy siting.

This is consistent with the following implementation actions in Policy D-2: Update generation potential based on future land developments, changes to land uses, or updates to priority areas as identified by state, regional, or municipal actions.

Considerations for Regional Plan Committee/Board of Commissioners

- Implementing Load Management strategies predominately replies upon the integration of communication technologies at the generation source. The regional plan does not speak to this component of renewable energy generation development however this could be a factor to consider in the update to the regional plan. Does the committee have any particular concerns or issues with this VELCO recommendation?
- Curtailment (limiting production) seem like the least favorable option for the future. Do Commissioners agree with this?
- Development of storage technologies is a recommendation of the LRTP and is specifically identified in the Regional Plan as a component in the development and siting of renewable energy generation. The committee may identify this recommendation as very favorable or preferable.
- Does the Committee have feedback on the readability and format of the Plan, in light of the target audience (interested parties including energy committees, planners, and other stakeholders)
- Does the Committee have feedback on the current information on battery storage contained in the draft plan- could the plan benefit from more explanation on the technologies associated with battery storage?

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Future Considerations for Regional Plan Committee in the regional plan update process

- Should the updated Regional Plan address the discrepancy between CVRPC'S Regional Plan targets for new renewable energy generation and VELCO's optimized distribution for the region (see previous section) and consider strategies to meet CEP targets that do not exceed VELCO projection for optimized distribution?
- Should the Regional Plan discuss GMPs generation project siting map with respect to available capacity for future generation projects?

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