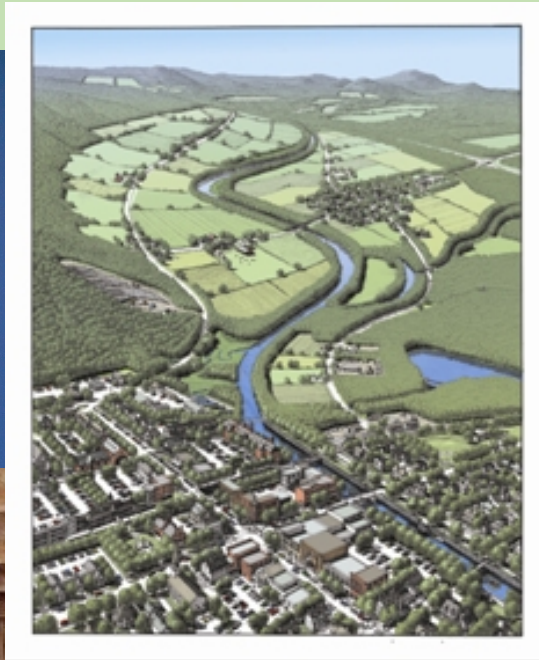


# Energy Planning and Act 174



# Agenda

5:30 - Welcome, Overview of Timeline & Draft Standards

Jon Copans, Deputy Commissioner, DPS

Asa Hopkins, Director of Planning & Energy Resources, DPS

6:00 - Public Comment (sign-up sheet at entrance)

7:30 - Conclude

Transcript will be made available at

<http://publicservice.vermont.gov/announcements/draft-energy-planning-standards>

Written comments due 10/20 to PSD.PlanningStandards@vermont.gov

# Act 174 – Planning Process Overview

- **Optional**; if municipalities choose not to pursue, then status quo. RPCs required to increase baseline energy planning. If municipalities pursue, must increase baseline energy planning like RPCs.
- Regions: submit adopted plan to DPS for determination of energy compliance. If affirmative, regional plan gets substantial deference in 248.
- Municipalities: submit adopted plan to RPC (if RPC itself has an affirmative determination) for determination of energy compliance. If affirmative, municipal plan gets substantial deference in 248.
- Until July 1, 2018, if RPC hasn't yet received a determination, municipalities may submit plans directly to DPS for a determination.
- Review includes a public hearing noticed 15 days in advance.
- DPS or RPC shall issue determination within 2 months of request.
- Resubmissions following a negative determination to be determined w/in 45 days.
- RPCs may appeal to the Natural Resources Board within 30 days.

# Determination of Energy Compliance (Substance)

To receive an affirmative determination, a plan must per Act 174:

- Include enhanced energy element that looks at all energy sectors (electric, thermal, transportation) and includes identification of potential and unsuitable areas for siting energy resources;
- Be adopted and, for a municipal plan, confirmed;
- Be consistent with state energy goals:
  - Greenhouse gas goals under 10 V.S.A. § 578(a)
  - 25 x 25 goal for renewable energy under 10 V.S.A. § 580
  - Building efficiency goals under 10 V.S.A. § 581
  - State energy policy expressed in the Comprehensive Energy Plan
  - The Renewable Energy Standard
- Meet the standards for issuing a determination of energy compliance

*NOTE: The determination may apply to, and draw upon, the entire plan, not just the energy element.*

# Standards

As required by Act 174, standards must address:

1. Analysis of total current energy use across transportation, heating, and electric sectors
2. Identification and mapping of existing electric generation and renewable resources
3. Establishment of 2025, 2035, and 2050 targets for energy conservation, efficiency, fuel-switching, and use of renewable energy for transportation, heating, and electricity
4. Analysis of amount of thermal-sector conservation, efficiency, and conversion to alternative heating fuels needed to achieve these targets

Continued...



## Standards (continued)

5. Analysis of transportation system changes and land use strategies needed to achieve these targets
6. Analysis of electric-sector conservation and efficiency needed to achieve these targets
7. Pathways and recommended actions to achieve these targets, informed by this analysis
8. Identification of potential areas for the development and siting of renewable energy resources and of the potential electric generation from such resources in the identified areas, taking into account factors including resource availability, environmental constraints, and the location and capacity of electric grid infrastructure
9. Identification of areas, if any, that are unsuitable for siting those resources or particular categories or sizes of those resources

# DPS must publish both Standards & Recommendations

Standards will include a list of criteria for issuing a determination of energy compliance that ensures consistency with the state's energy goals and policies and the recommendations from the state energy plan.

Recommendations will be initially be drawn from recommendations already contained in the 2016 Comprehensive Energy Plan, filtered by relevancy to regions and towns. They will provide strategies and options to meet the state's energy goals and policies.

# Draft Standards: Analysis

- Standards ask regions and towns to estimate usage across sectors, set targets, and analyze ways to reach targets
- Much of it is already complete through RPCs being supported by DPS
  - Draw upon Total Energy Study (2014) modeling, which looked at different scenarios to reach 90 by 2050
  - Uses Long-Range Energy Alternatives Planning (LEAP) tool
- Standards require regions to provide analyses to their municipalities
- Municipalities that use the analysis provided by their regions will meet the Analysis standards
- Municipalities that choose to undertake their own analyses will need to meet the standards laid out for regions
- N/A is provided as an option for standards that may not be relevant to all regions or towns



# Draft Standards: Pathways (Implementation Actions)

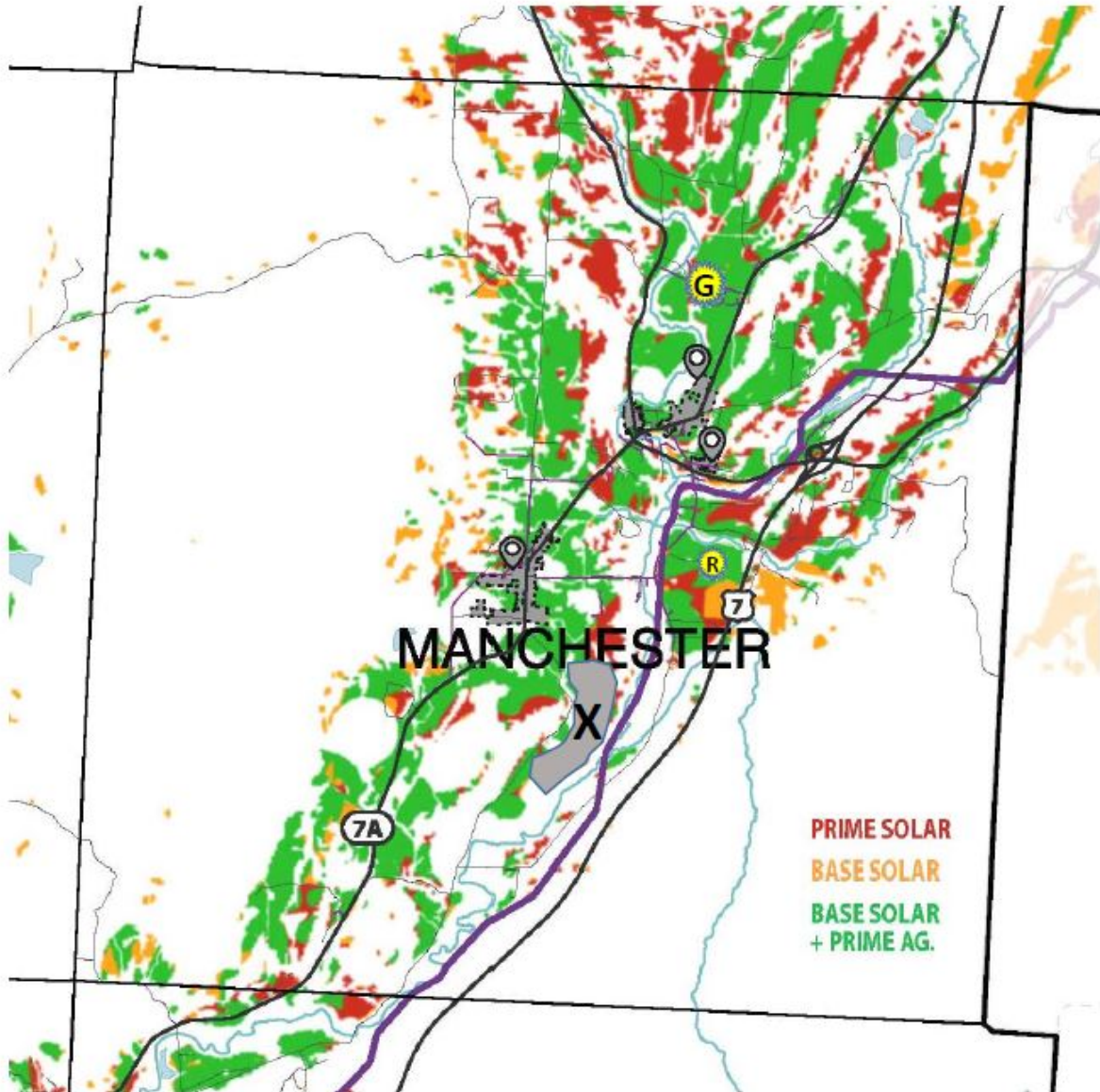
- Standards ask regions and towns to include efficiency, transportation, and generation actions to reach the targets
- Examples are provided in italics in the draft; eventually these will move to guidance
- Draft regional plans provide additional examples, and regions will be collating “best practices” from their towns
- Standards are designed to provide maximum flexibility (“appropriate,” N/A, Other)
- Standards ask regions and municipalities to compare generation potential to targets and then identify sufficient potentially suitable area to reach targets; also to identify preferred locations

# Draft Standards: Mapping

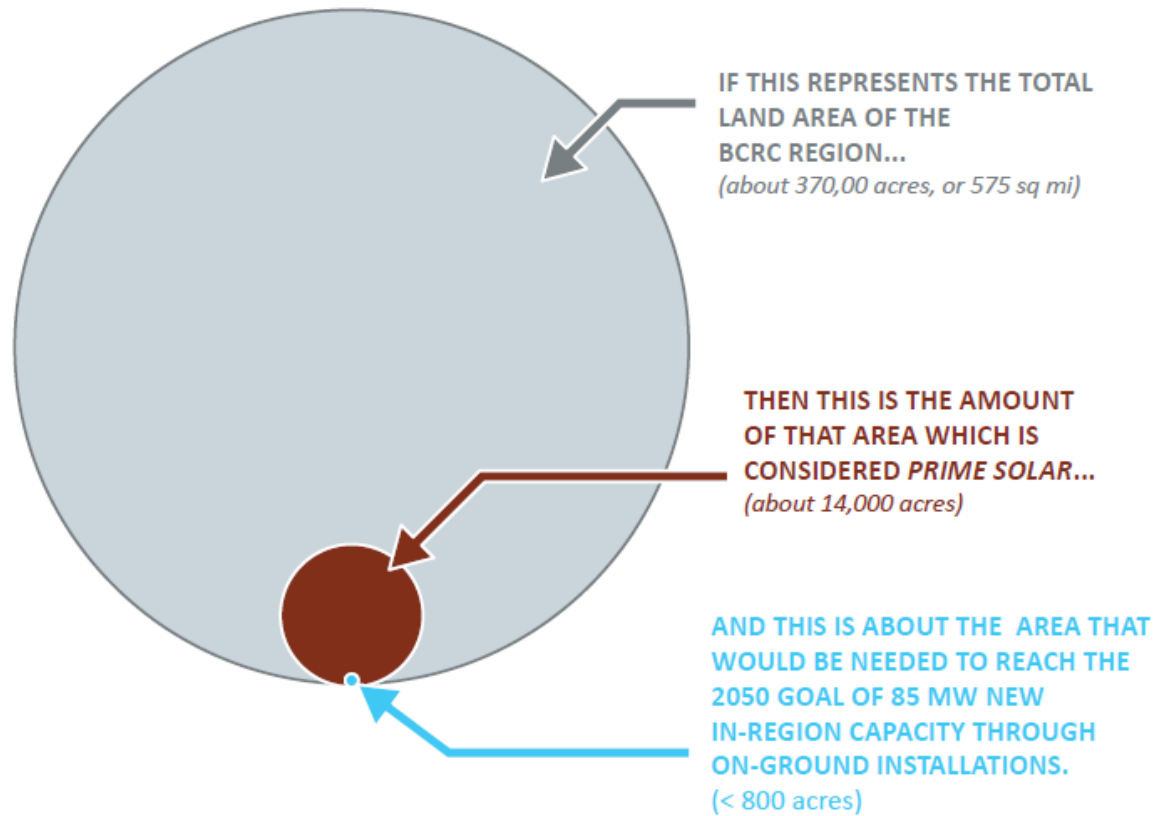
- Mapping of potential resources (wind, solar, hydro, biomass) and primary and secondary constraints is available (or underway) through the regions.
- Draft mapping standards ask:
  - Map Base Resource potential by analyzing resource availability (e.g. solar potential) and subtracting “Known Constraints” including: Vernal Pools; River Corridors; FEMA Floodways; State-significant Natural Communities and Rare, Threatened, and Endangered Species; Transportation Infrastructure Federal Wilderness Areas; Wetlands; and regionally or locally identified critical resource areas
  - Map Prime Resource areas by taking Base Resource maps and subtracting “Potential Constraints” including: Agricultural Soils (prime + statewide = primary); FEMA Flood Zones; Conserved Lands, Deer Wintering Areas; ANR’s Vermont Conservation Design Highest Priority Forest Blocks; Hydric Soils; and regionally or locally identified resource areas
- Regions and towns can start with these maps and add areas where they would like to explicitly encourage or avoid development.

# Example: Bennington RPC

- Act 174 calls for identification of potential areas for the development and siting of renewable resources, taking into account resource availability, environmental constraints, and the grid
- Also unsuitable areas for resources or resource categories/sizes



# Example: Bennington RPC



## Standards Timeline

- To date: focus groups on transportation, efficiency, and generation; survey; cross-cutting forum; draft standards & CEP recommendations posted
- Oct. 2016: tonight's public hearing, comments due 10/20
- Nov. 1, 2016: standards and recommendations published
- December 2016: additional guidance published
- Winter 2016 through 2017: training for towns and regions in partnership with RPCs and VLCT

# Public Comment

Jon Copans  
VT Public Service Department  
[Jon.Copans@Vermont.gov](mailto:Jon.Copans@Vermont.gov)  
(802) 828-3088

Asa Hopkins  
VT Public Service Department  
[Asa.Hopkins@Vermont.gov](mailto:Asa.Hopkins@Vermont.gov)  
(802) 828-4082