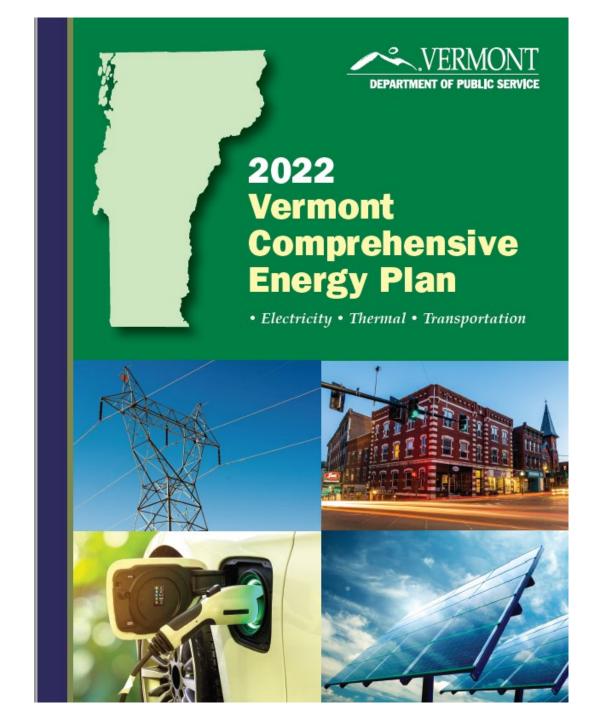
Overview of Vermont's Comprehensive Energy Plan



Comprehensive Energy Plan & Climate Action Plan

Climate Action Plan

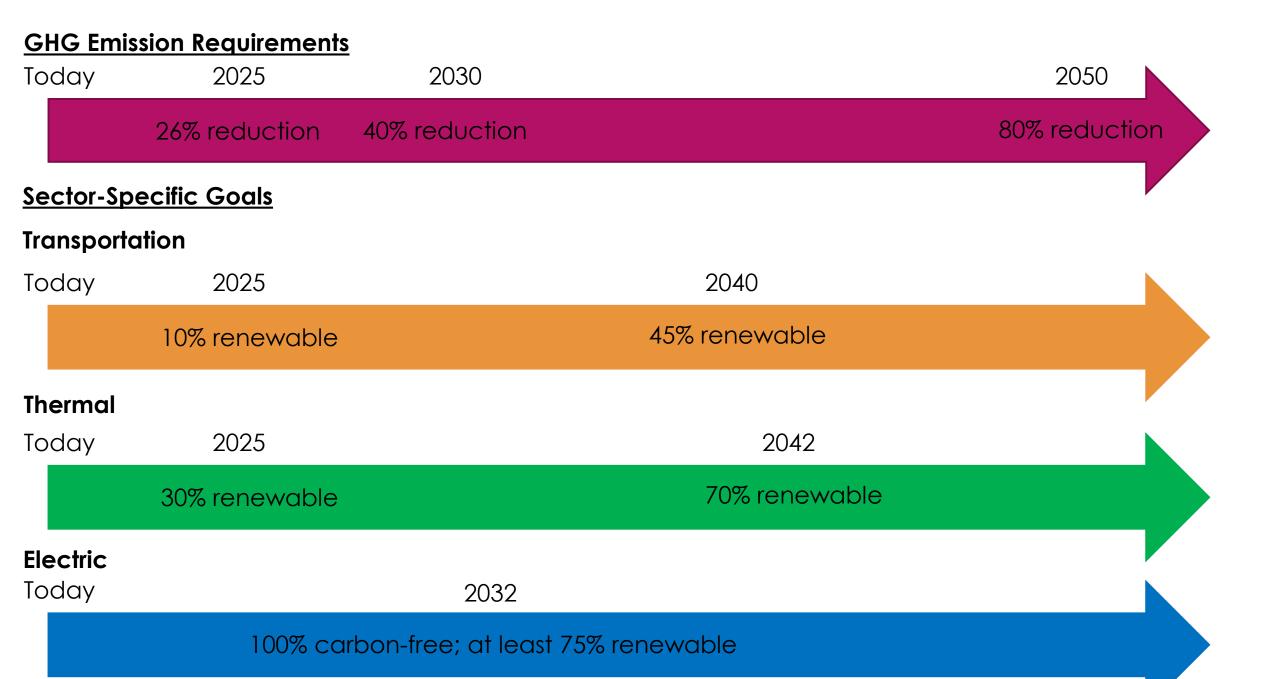
- Climate Adaptation
- Non-Energy GHG Emissions: Agriculture, Waste, etc.
 - Sequestration
- GHG Inventory Review

Overlap

- Cost-effective GHG Reduction Targets
- Energy Sector Analysis incl. policy & technology scenarios & pathways
 - Public Engagement & Modeling Efforts
 - Equitable Transitions

Comprehensive Energy Plan

- Renewable Energy Development
- Electric Plan including Reliability
- Energy System Planning: Adequacy, security, sustainability, Affordability, Economic vitality
 - Standards for Local Planning (Act 174)



Equity

Energy Inequity

- Energy burden (% of income spent on energy expenditures) is as high as 20% in some VT communities
 - Renters vs. homeowners; non-white vs. white
- Adoption of clean technologies has mostly occurred in communities with low energy burden

Key Recommendations from the CEP:

- Equity should be considered as core criteria in all decision-making that guides energy policy in Vermont
- DPS should complete a review of energy-related public processes and recommend changes to encourage more inclusive and transparent engagement with Vermonters
- Act 174 enhanced energy plans should include analyses of the potential equity impacts of proposed policies, objectives, and goals in the plans

Transportation and Land Use

- Pathways and strategies largely the same as the CAP
 - Heavy focus on electrification
- Encourages regional and municipal planning to identify preferred locations for public-serving DC fast chargers
 - Coincides with National Electric Vehicle Infrastructure (NEVI)
 Formula Program



Photo credit: Evgo. https://www.evgo.com/case-studies/green-mountain-power/

Thermal

- Same policy/program recommendations as the CAP (Weatherization at Scale, Clean Heat Standard, Workforce Development, etc.)
- Net-zero ready new construction standards by 2030 (but no enforcement)
- Consider mandatory 200-amp service for new construction at next code update



Photo credit: Efficiency Vermont. https://www.efficiencyvermont.com/products-technologies/heating-cooling-ventilation/heat-pumps

Electric Resources

- Consider a 100% renewable or carbon-free Renewable Energy Standard
- Consider development of a community solar program to make access to renewable energy more equitable
- Encourage more detailed, proactive planning around siting of renewables



Photo credit: Norwich Technologies. https://norwichsolar.com/projects/town-of-woodstock-vermont/

TRORC Grid Constraints

Installed Solar PV as of 2020 (MW)	Optimized Solar PV Distribution (MW)	2025 Target (Existing Solar + New Renewables (MW)	2035 Target (Existing Solar + New Renewables (MW)	2050 Target (Existing Solar + New Renewables (MW)
38.7	98	66.5	125.5	190.5

Act 174 Updates

- Effective Jan. 14, 2022
- "All plans submitted after the 2022 CEP was issued are expected to meet these updated standards, except of plans for regions or municipalities who can demonstrate they had meaningfully initiated the planning process (e.g. through proof of a publicly noticed meeting) before the 2022 CEP was published."

Act 174 Updates Cont.

- Updates to the standards, <u>which can be found on DPS' website</u>, include, but are not limited to:
- Streamlined language
- Enhanced consideration of climate and grid resilience, equity, and advances in technologies
- Updates to the Mapping Standards to emphasize the value of forest lands in sequestering and storing carbon, consistent with Vermont's Climate Action Plan

Act 174 Updates Cont.

Estimated Timeline:

January 2022:

Compilation and posting of all the municipal and regional recommendations in the CEP

April 2022:

Updated guidance for regional and municipal plans

May 2022:

Regionalized LEAP scenarios/workbook tools, consistent with statewide LEAP modeling and targets adopted for the CEP and CAP

July 2022:

Generation target scenarios tool Map layers in VCGI

The **generation target scenarios tool** will include several potential scenarios for planners to consider in their local target setting, including sensitivities for electrification demand, grid constraints, and renewability of utility power supply.