Comprehensive Energy Plan

Vermont's Energy Future – 2011 Comprehensive Energy Plan

Fulfilling a first-year priority for Governor Shumlin, the Department of Public Service led a multi agency initiative to complete the state's first Comprehensive Energy Plan (CEP) since the late 1990s. The CEP is comprehensive, covering electricity, heating and process fuels, and energy in transportation and land use decisions.

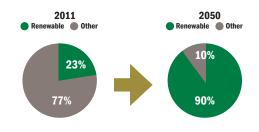
A Snapshot of Our Current Energy Usage

Vermont currently obtains nearly a quarter of the energy it uses from renewable sources, due in large part to the fact that nearly half of our electricity is generated from renewable sources. Robust electric efficiency efforts in the past decade have also helped significantly—we are keeping our electric demand down and using many renewable sources to meet our need. However, we have made comparatively little progress on improving our energy usage in transportation and heating. We drive more than we did a generation ago, using fossil fuels to power our vehicles. Although biomass and solar thermal systems have made a dent in our fossil fuel heating usage, Vermont continues to be heavily reliant upon heating oil. We have not made enough progress in improving the comfort and affordability of our homes by reducing their energy usage.

The Vision for Vermont's Energy Future

The CEP recommends that Vermont set a path to obtain 90% of our total energy from renewable sources by 2050.

Meeting this goal will require us to virtually eliminate Vermont's reliance on fossil fuels, which we can do through enhanced efficiency and greater use of clean,



renewable sources for electricity, heating and transportation. We recommend the midcentury goal while recognizing that we must pursue our goals responsibly, ensuring overall energy costs for our businesses and residents remain regionally competitive. But we must also act boldly to protect our environment and our economic security.

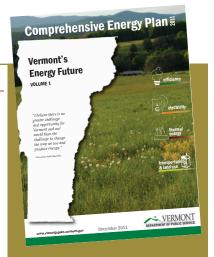
How Vermont Can Achieve This Goal

In order to sustainably build Vermont's energy future, we recommend concerted, systematic progress, understanding the multifaceted nature of the energy challenge. The four drivers of progress are Finance & Funding; Innovation & Expertise; Outreach & Education; and Regulatory Policies & Structures. Each of these facets must be addressed in any area of energy policy.

Plug-in Electric Vehicles (PEVs) provide an example: PEVs link high technology, personal transportation choices, and regulated electricity. They also depend on roads and bridges, currently paid for through fossil fuel



taxes, as well as charging infrastructure, for which there is no standardized funding. To harness renewable electricity for transportation, robust solutions will depend on regulatory and financing innovation as much as technological innovation. Meanwhile, the pace of PEV demand will depend on consumer understanding of the advantages and practicalities of PEV travel. Progress only in one area will not yield effective results. The same analysis applies to other policy areas. The CEP therefore recommends that all four drivers are considered in any energy policy discussion to ensure success.



Why We Should Work For 90% Renewable Energy by 2050

Moving Vermont from nearly a quarter renewable energy now to nearly fossil-fuel free by 2050 will:

Foster economic security and independence by creating jobs in efficiency and local renewable energy projects; by keeping our dollars closer to home; and by cutting our dependence on dirty pricevolatile fossil fuels.

Safeguard our environmental

legacy by reducing our contribution to global climate change and leading by example in the fight to keep our planet safe and habitable for generations to come.

Drive in-state innovation and job creation by showing that
investments in efficiency and
renewable energy, which help
our environment and energy
independence, also help our
economy.

Increase community involvement and investment by engaging Vermonters in our energy choices.



Implementation and Next Steps

The CEP is the beginning of the conversation—not the end. We recognize that a successful plan must remain current and responsive to change, and must be implemented by Vermonters broadly, not just state government, to achieve success. Governor Shumlin's Climate Cabinet will help measure and monitor CEP progress and support public involvement for further action. Many policy recommendations are included in the CEP. Immediate priorities include:

Efficiency First—Use Less and Save Money

The CEP promotes efficiency and conservation as first priorities in all energy sectors and recommends creating a whole-buildings efficiency roadmap, including program delivery, consumer outreach, funding and finance mechanisms, and progress metrics, by the end of 2012.

Continued Progress on Renewable Electricity

Building on the progress Vermont has achieved through the SPEED program, the CEP recommends establishing an affordable and achievable Renewable Portfolio Standard that sets a goal to obtain 75% renewable electricity within 20 years. The CEP also recommends that Vermont improve its Standard Offer program to allow clean energy contracts for distributed generation using an annual allocation and market-based pricing.

Comfortable Homes, Affordably Heated

In addition to the whole-building efficiency roadmap mentioned above, the CEP recommends setting aggressive goals for energy efficiency and code compliance in new construction, while supporting greater use of bio-blended fuels and renewable energy technologies.

Transportation Transformation

To prepare for the transportation fuel and funding changes ahead, the CEP recommends establishment of an interagency task force to plan for electric and alternative fuel vehicles in Vermont and the region.

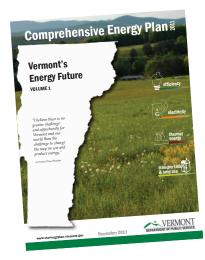
Resilient Communities, Smart Land Use Choices

In the wake of Tropical Storm Irene, the need to align local, regional, and state policies across agencies and departments to support thoughtful and resilient growth in our downtowns and villages has never been more acute. The Agency of Commerce and Community Development, with the support of the Climate Cabinet, will complete a review of the state's designation programs in 2012.

State Leading By Example

Prior to Tropical Storm Irene, the state had already set a goal of 5% reduction in energy usage across state government. Now that the state faces significant infrastructure repair and rebuilding, energy usage in our state buildings is even more central to our planning. The CEP recommends that the state sharpen its focus on efficient buildings while strategically deploying renewable energy systems.

Vermont's Energy Future: Cleaner, Brighter, Affordable, and Secure



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