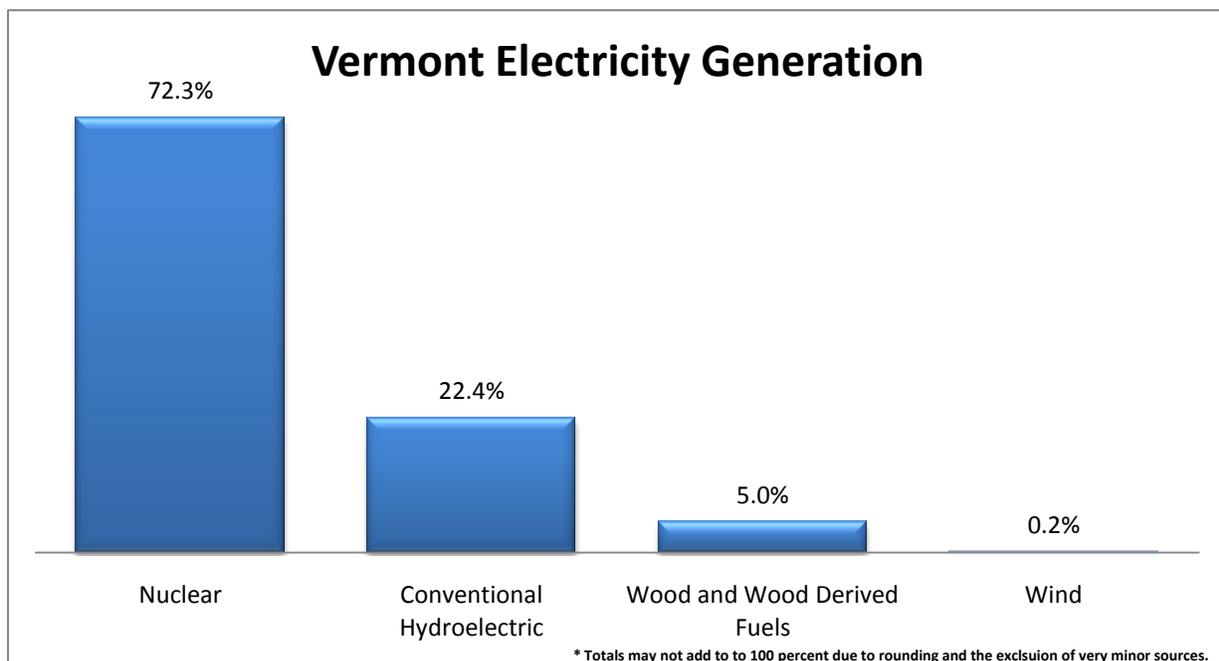




Vermont Energy Facts

Vermont – Select Economic and Energy Data [†]		State Rank
Real Gross Domestic Product, per capita	\$34,924	22nd lowest
Unemployment	6.6%	5th lowest
Gasoline Price, per gallon	\$2.84	17th highest
Electricity Price, per kWh	12.75¢	12th highest

Vermont has expensive electricity prices (29 percent above the national average). Like most of the states in the Northeast, Vermont’s electricity prices are among the highest in the country. Vermont is one of just two states in the country without coal-generated electricity. Instead, the state primarily uses nuclear power, which produces over 70 percent of the state’s electricity, with most of the generation coming from the Yankee Nuclear Power Plant. Vermont uses nuclear power for a larger proportion of its electricity than any other state.



While the state has no fossil fuel resources, Vermont uses other natural resources for most of its non-nuclear electricity. Vermont generates over 20 percent of its electricity from hydroelectric power, produced on the Connecticut River and Lake Champlain, and 5 percent from biomass, collected from the state’s forests, for most of its remaining electricity supply. Wind energy minimally contributes to the state’s electricity.

Regulatory Impediments to Affordable Energy

Although affordable energy is a vital component of a healthy economy, regulations frequently increase energy costs. Regulations imposed in the name of reducing carbon dioxide and greenhouse gas emissions are especially costly. Carbon dioxide is a natural byproduct of the combustion of all carbon-containing fuels, such as natural gas, petroleum, coal, wood, and other organic materials. Today, there is no cost-effective way to capture the carbon dioxide output of the combustion of these fuels, so any regulations that limit carbon dioxide emissions will either limit the use of natural gas, petroleum, and coal, or dramatically increase their prices.

Below are some facts about Vermont's regulatory environment that are like to affect the cost of energy or the cost of using energy. Vermont has enacted several policies that increase the cost of electricity or gasoline. Electricity prices in Vermont are among the highest in the country, owing in part to some of its regulations. These prices, and its lack of industry, may contribute to Vermont's status as the lowest energy consumer in the nation and one of the lowest per capita. Vermont also has the lowest demand for petroleum in the country.

- **Vermont does not cap** greenhouse gas emissions. However, as a member of the Regional Greenhouse Gas Initiative, it has imposed a cap on greenhouse gas emissions from power plants.
- **Vermont is a member** of the Regional Greenhouse Gas Initiative (RGGI), a regional agreement among ten Northeast states to limit greenhouse gas emissions. This agreement requires states to cap carbon dioxide emissions from the electrical generation sector and to reduce those emissions by 10 percent by 2018 through a cap-and-trade scheme.
- **Vermont requires** utilities to generate from renewable sources a certain percentage of the electricity that they sell unless their goals are not met. The state has a non-binding renewable portfolio goal that utilities generate 20 percent of electricity from renewable sources by July 1, 2017.¹ However, if certain interim goals are not met, this goal will become a mandated standard. In addition, the same legislation included a goal that 25 percent of energy consumed in Vermont be generated from renewables by 2025.
 - **Vermont imposes** a feed-in tariff for renewables, requiring utilities to purchase renewable energy at an increased price. House Bill 446, enacted in 2009, offers this incentive to every participating renewable generator with a nameplate capacity of 2.2 megawatts or less.² The law sets a program cap of 50 megawatts, after which new generators will no longer be offered the incentive. By increasing the cost of renewable energy, this law increases electricity prices for consumers and businesses.
- **Vermont does not require** gasoline to be mixed with renewable fuels. However, Vermont's governor agreed to cooperate with other Northeastern states to develop a regional low-carbon fuel standard.
- **Vermont imposes** automobile fuel economy standards similar California's, which include attempts to regulate greenhouse gas emissions from new vehicles. The Vermont Air

Pollution Control Division amended its low-emission vehicles regulation in November 2005 by enacting a rule to adopt California's vehicle emissions standards.³

- **Vermont requires** new residential and commercial buildings to meet energy efficiency standards. The state enforces the Vermont Residential Building Energy Standards (RBES), which is based on the 2000 International Energy Conservation Code (IECC) for residential buildings. The IECC, developed by the International Code Council, is a model code that mandates certain energy efficiency standards. Commercial buildings must follow similar statewide guidelines that are based on the 2004 IECC with amendments to include ASHRAE 90.1-2004 and state-specific amendments.⁴ ASHRAE 90.1 is a model code that mandates certain energy efficiency standards and was developed by the American Society of Heating and Refrigeration and Air Conditioning Engineers. House Bill 446, enacted in 2009, directed the Department of Public Service to amend the state's codes to comply with the 2009 IECC or ASHRAE 90.1-2007, whichever is greater, by 2011.⁵
- **Vermont imposes** state-based appliance efficiency standards. House Bill 253, enacted in 2006, established efficiency standards for medium-voltage dry-type transformers, metal halide lamp fixtures, residential furnaces and boilers, and residential furnace fans.⁶
- **Vermont allows** one electric utility to "decouple" revenue from the sale of electricity, and other utilities may apply for decoupling. Decoupling revenue from actual sales allows utilities to increase their revenue by selling less electricity and natural gas.

[†] Data Sources: Real GDP per capita 2008: Bureau of Economic Analysis, *News Release: GDP by State* (June 2, 2009), http://www.bea.gov/newsreleases/regional/gdp_state/gsp_newsrelease.htm; Unemployment: Bureau of Labor Statistics, *Regional and State Employment and Unemployment—February 2010* (Mar. 10, 2010); Gasoline Prices: American Automobile Association, *AAA Daily Fuel Gauge Report* (Mar. 30, 2010); Electricity Prices: Energy Information Administration, *Electric Power Monthly*, Table 5.6.B., Average Retail Price of Electricity, (March 15, 2010), http://www.eia.doe.gov/cneaf/electricity/epm/table5_6_b.html; Electricity Generation Data: Energy Information Administration, *Electricity Generation 2009*, http://www.eia.doe.gov/cneaf/electricity/epa/generation_state_mon.xls.

¹ VT. STAT. Ann. Title 30, Chapter 89 (2009),

<http://www.leg.state.vt.us/statutes/sections.cfm?Title=30&Chapter=089>.

² Vermont Energy Act of 2009, H.B. 446 (Vt. 2009), <http://www.leg.state.vt.us/docs/2010/bills/House/H-446.pdf>.

³ Vermont Agency of Natural Resources – Air Pollution Control Division, Subchapter XI: Low Emission Vehicle Program, 5-1101, Definitions, <http://www.anr.state.vt.us/air/docs/Adopted%20GHG%20Rule.pdf>.

⁴ Building Codes Assistance Project, Code Status: Vermont, <http://bcap-energy.org/node/46>.

⁵ Vermont Energy Act of 2009, H.B. 446 (Vt. 2009), <http://www.leg.state.vt.us/docs/2010/bills/Passed/H-446.pdf>.

⁶ Database of State Incentives for Renewables and Efficiency, Vermont Energy Efficiency Standards for Appliances, http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=VT05R&re=0&ee=1.