



## ENERGIZING PROSPERITY

A position paper by Campaign for Vermont Prosperity  
October 5, 2012

### Executive Summary

Clean, affordable, safe, and reliable energy, especially electricity, is a cornerstone to affordable living, a diversified, dynamic, competitive economy, and a low carbon footprint. Yet despite the State of Vermont's professed desire to provide low cost, low carbon energy, our citizens and businesses pay among the highest electric rates in the country and New England while remaining highly dependent upon carbon-emitting fossil fuels for transportation and home heating.

*Campaign for Vermont* believes a thoughtful blend of positive economic and environmental goals, not politics, ideology or cronyism, should drive Vermont's energy policy. Competitive electricity prices are vital to any renewal of manufacturing and other job sectors dependent on low cost reliable energy. Competitive electricity prices matter to every business operating on a razor-thin profit margin. While "green" energy jobs are valued, they are not as important as jobs created and sustained more broadly in an economy supported by overall low energy costs. Lower electricity costs also promote affordable living for all consumers, most especially for lower-income Vermonters for whom unnecessarily high residential rates are tantamount to a regressive tax on a basic necessity.

*Campaign for Vermont* believes, therefore, that clean, competitively priced energy, especially electricity, is a social good. At present, the State of Vermont aggressively forces utilities to buy very high cost electricity from solar, wind and small hydro dam developers, thus unnecessarily driving up electric rates. This is a misguided energy and economic policy in response to legitimate concerns about climate change. While recognizing that Vermont has an enviable carbon footprint, Vermont can best address further reductions in carbon while promoting economic prosperity with policies that encourage competitively priced electricity.

Vermont's current approach pushes electric rates artificially high, thus discouraging cost-conscious consumers from switching from fossil based fuels to electricity for transportation and heating. A grassroots shift away from fossil fuels to other forms of power requires underlying economic costs to be competitive. The state's political leadership and the Vermont Department of Public Service (DPS) have failed to give consumers the competitive tools for change, so our citizens remain overly dependent on high-cost, high-polluting fossil-fuels.

When it comes to competitively priced electricity, Vermont is way out of step and heading in the wrong direction relative to our national and regional competitors.

#### Vermont Electric Rate Rankings - U.S. Contiguous States June 2012

Residential	17.02 cents/kWh	2 <sup>nd</sup> Highest
Commercial	14.35 cents/kWh	4 <sup>th</sup> Highest
Industrial	10.18 cents/kWh	7 <sup>th</sup> Highest

Source: <http://www.eia.gov/electricity/monthly/pdf/epm.pdf> (Table 5.6.A.)

In fact, since 2008, Vermont's residential, commercial and industrial electric rates have increased by 17.5%, 14.9% and 10.8% respectively while comparable rates in New England have dropped by 11.1%, 11.9% and 8.3%. Relative to national averages, Vermont's rates are an eye popping 40% higher.

Reducing energy costs is not a pipe dream. In nearby [Massachusetts](#), many ratepayers have seen double-digit slashing of their power bills within the last year. The infinitesimal rate decrease proposed recently by Green Mountain Power Corporation (GMP) is not enough. *Campaign for Vermont* believes Vermont can significantly reduce all-fuels energy costs and our carbon footprint over the next decade by providing consumers access to cheaper and cleaner alternatives to oil.

State government and the Vermont Public Service Board (PSB) can act to lower electricity rates and encourage the construction of vital energy infrastructure that places the power of choice back in the hands of consumers. Informed Vermonters will be empowered to lead the way to a cleaner, more prosperous future, if given the opportunity.

### **Vermonters Pay More than Necessary: Context and Key Data Points**

State Policies Force Higher Electricity Costs: Vermont's elected officials promise an energy future built on efficiency and clean, renewable power. But, the 2011 Vermont Comprehensive Energy Development Plan (VCEP), as presented by the Shumlin Administration, fails to harness the powerful drive of consumer choice. Instead, expensive, inefficient renewable power is promoted as the dominant power supply solution. VCEP sets Vermont on a path to have renewable sources provide 75 percent of our electricity in 20 years.

This top-down approach to development of in-state renewable power suffers from one inherent fatal flaw - it costs too much. Renewable energy developers require large government subsidies to make their business plans work. While state leaders force consumers to buy expensive electricity, on the rare occasions in which consumers have been offered the choice to pay more for renewables - such as the well-known the CVPS Cow Power program - the great majority have declined. In response to consumer rejection, elected officials simply mandated renewable power purchases. Vermonters were told in effect, "if you won't buy it, we'll make you buy it." This was accomplished at the urging of renewable power developers, some of whom contribute generously to political campaigns.

One might wish otherwise, but the unfortunate truth is that renewable energy is expensive and has been expensive for a long time. While power from the New England grid (mostly natural gas, nuclear, coal, and hydro) costs about 5-cents per kilowatt-hour (KWH) wholesale, Vermont's elected officials passed laws and the PSB issued mandates that require wind and solar developers be paid upwards of [27 cents per KWH](#). This cost is passed on by the utilities to Vermont's electricity ratepayers. So, who benefits from this policy? Renewable power developers benefit over Vermont's ratepayers.

Despite decades of extensive investments and research, the solar alchemy has yet to be found that makes the production of solar electricity in Vermont affordable. The renewable power industry predicts it will happen thanks to economies of scale and technological breakthroughs. *Campaign for Vermont* believes small Vermont cannot afford these steep upfront market development costs. The time to deploy cutting edge renewables is when these technologies are actually cost effective. Until then, taxpayer and ratepayer money is better left in consumers' pockets rather than used to fund the deployment of immature and costly technologies. The high cost of renewable power and serious, unsolved technological problems of transmitting large amounts of intermittent power dictate the "tipping point" is still well in the future. When the economic environment is friendlier,

Vermonters will jump on board. Alone, Vermont's energy use is not of the scale to materially affect research and development or generate the necessary economies of scale to push these new technologies to economic effectiveness. Yet, our state leaders extract millions of dollars from ratepayers to fund the promotion of these expensive technologies, including feed-in-tariffs projected to cost \$17.3 million at 50 MW, net metering credits at \$.20 per kWh, efficiency charges at more than \$40 million, among others.

Further, the legislature, Governor and the PSB are not reticent to use the rate base to lower rates for some at the expense of others. On September 6, 2012, the PSB announced a new program for GMP customers, in cooperation with Vermont's Agency of Human Services, to provide a 25% discount on electric bills for those with incomes less than 150% of poverty (<http://psb.vermont.gov/sites/psb/files/orders/2012/2012-9/7535Phase2Order.pdf>). This program will be paid for by new meter charges on GMP's residential, commercial and industrial customers and is projected to cost upwards of \$5.5 million, assuming a 30% participation rate of eligible beneficiaries. The PSB's review of this matter, however, anticipates the expansion of this program to all electric utilities in Vermont. For ratepayers, the risks of even higher rates from this program are many. For example, if the PSB's estimates on participation rates are higher than estimated (and the PSB's recommendations call for aggressive outreach), there will be pressure to raise the meter charges. Further, the PSB anticipates the legislature raising the eligibility standard to 180% of poverty to achieve consistency with the recently raised eligibility standard for the Agency of Human Services' Low Income Home Energy Assistance Program (LIHEAP), now mostly funded with federal funds.

In the big sea of energy supply and demand, Vermont is a very small fish. The United States Energy Information Administration (USEIA) reports that for 2010, Vermont consumed a meager 2/10ths of one percent of all energy consumed in America and produced only 1/10<sup>th</sup> of one percent of all energy supplied, most of which came from Vermont Yankee. At these slight levels, Vermont has negligible influence upon energy markets and therefore is unable to leverage terms to energy suppliers. Given this, there is no reasonable rationale to force premium prices on Vermont's captive residential and commercial ratepayers in the hopeless attempt to have 75% of Vermont's electric power come from renewable, as is Vermont's current policy.

Higher Electric Costs Inhibit Carbon Reduction: Vermonters have a strong environmental ethic. *Campaign for Vermont* supports minimizing the state's carbon footprint. Before the Vermont Yankee contract expired in March of 2012, much of the state's energy came from low-carbon nuclear and Hydro-Québec sources. Vermont's carbon footprint was among the lowest in America at 10.1 metric tons of carbon dioxide per capita versus a national average of 17.6 metric tons, ranking our state 3<sup>rd</sup> best among the 50 states. Carbon figures for our present-day, more fossil-fuel dependent power generation are not available.

Vermont officials should not be too quick to pat themselves on the back for their carbon footprint. First, one reason for our favorable ranking is our small manufacturing sector. Most Vermonters would gladly accept marginally higher power consumption for thousands more good-paying jobs. Second, Vermont has a relatively high reliance on high-carbon petroleum products for transportation and home heating, even though lower-carbon alternatives are available. If Vermonters want their neighbors to reduce fossil fuel consumption for transportation and home heating uses through conversion to more electric based technologies, then it is vital that Vermont's electric rates not remain among the highest in the nation and that our state government makes every reasonable effort to lower rates, rather than cause them to rise.

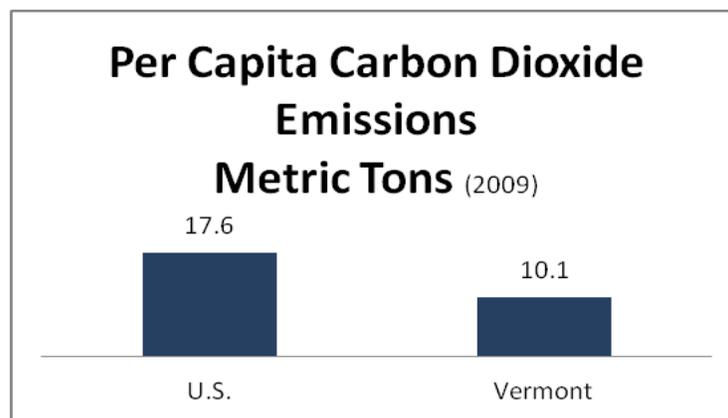
Broaden the Focus Beyond Renewables to Give Vermonters Choice: Given Vermont's small standing within national energy markets, utilities attempt to be nimble to lock-in contracts for competitively priced imported energy when available, especially when an energy source exhibits low carbon

emissions. Yet, utilities must also manage supply knowing that over time changes in markets and technologies may dramatically affect the relative cost of energy. For example, back in the 1990's, many Vermonters castigated former Governor's Snelling and Dean for their support of long-term contracts with Hydro-Québec as being expensive and environmentally unsound.

Today, the tide has turned. Hydro-Québec is recognized as relatively inexpensive, desirable base-load electricity source and has even been defined by the Legislature as a "renewable" source of power. As another example, the recent emergence of low-cost natural gas is a "game changer". Prices have dropped more than 50 percent over the past three years, bolstering natural gas consumption and encouraging conversion to affordable electricity with carbon emissions that, while far higher than nuclear, hydro, solar or wind, are considerably lower than coal. Vermont should pursue the construction of natural gas powered plants in areas of high demand and where natural gas infrastructure exists, such as Chittenden County, or can reasonably be developed.

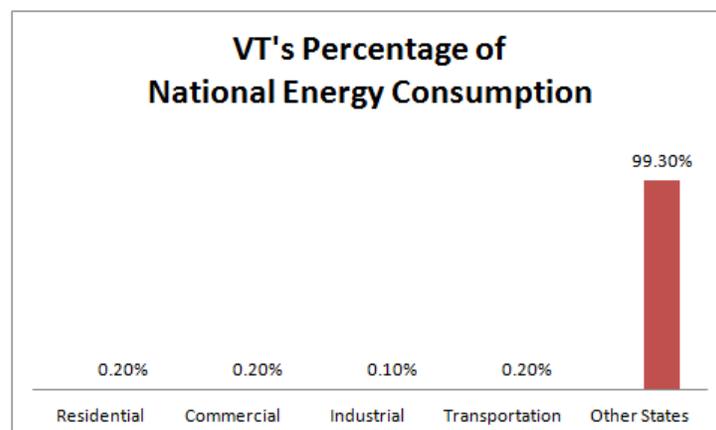
Below are some key data points about Vermont's energy picture:

1. In 2009, Vermont was 3rd among states in per capita carbon dioxide emissions at 10.1 metric tons versus 17.6 metric tons per person for the United States.



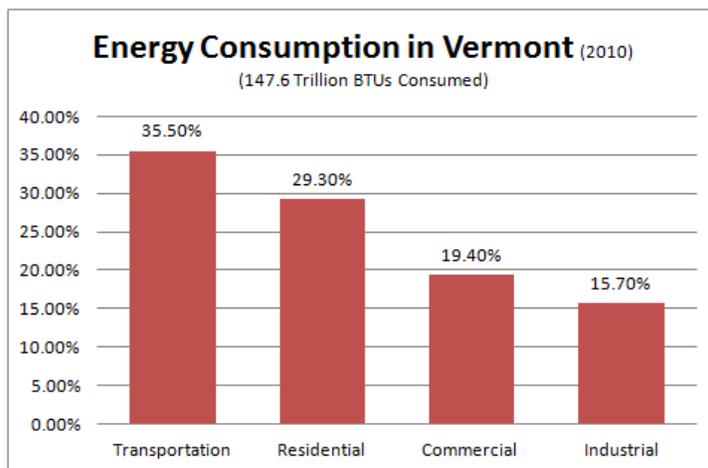
Source: <http://www.eia.gov/environment/emissions/state/analysis/> (See Table 5)

2. Vermont consumes a very small portion of national energy supplies.



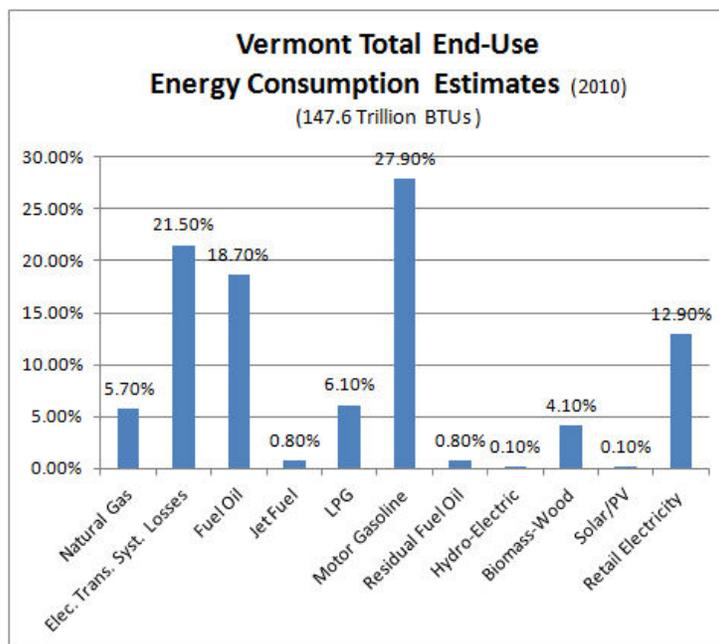
Source: <http://www.eia.gov/state/state-energy-profiles-data.cfm?sid=VT#Consumption>

- The largest portion of Vermont's energy consumption (35.5%) occurs for transportation purposes, followed by residential use at 29.3% and commercial and industrial uses at 19.4% and 15.7% respectively.



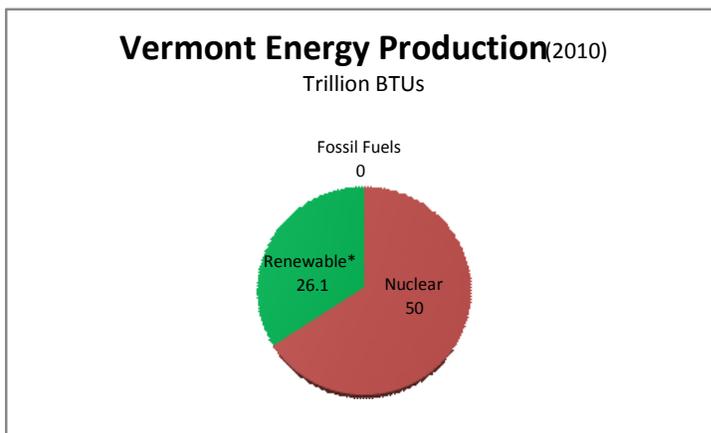
Source: [http://www.eia.gov/state/seds/seds-states.cfm?q\\_state\\_a=VT&q\\_state=Vermont#undefined](http://www.eia.gov/state/seds/seds-states.cfm?q_state_a=VT&q_state=Vermont#undefined)

- Vermont residents consume a high proportion of petroleum fuels, 55% of the total, while electricity comprises only 12.9% of end-user consumption.



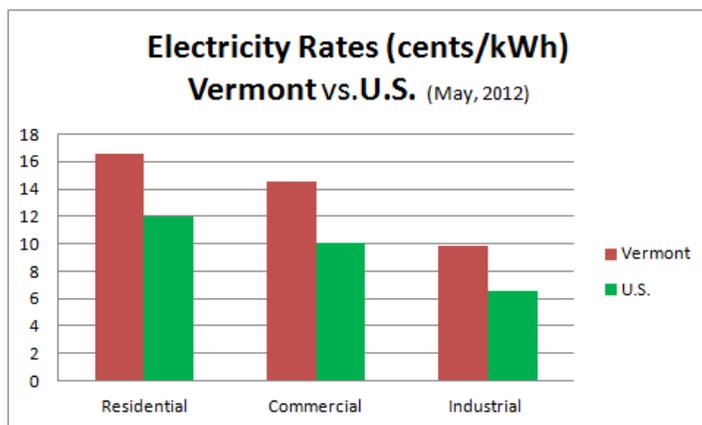
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5. Vermont produces an infinitesimal portion of national energy supplies at .1%, the majority of which is generated by nuclear energy.



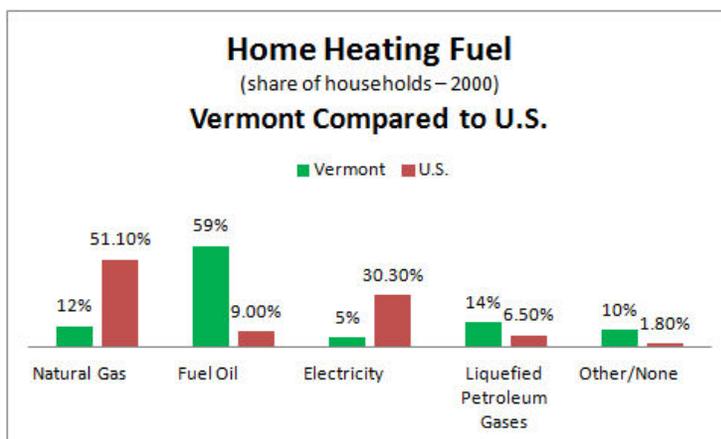
Source: <http://www.eia.gov/state/state-energy-profiles-data.cfm?sid=VT#Reserves>  
*\*Note: Assumed to equal consumption of all renewable energy sources*

6. Electric rates in Vermont, regulated by the PSB, are among the highest in the nation. While Vermont's rates have continued to rise, other states are experiencing rate reductions as the cost of natural gas declines. The tiny rate decrease proposed this summer by GMP was attributed as much to savings from the utility merger as from the cost of fuels.



Source: <http://www.eia.gov/state/state-energy-profiles-data.cfm?sid=VT#Prices>

7. Vermonters utilize a much higher percentage of oil-based fuels for home heating.



Source: <http://www.eia.gov/state/state-energy-profiles-data.cfm?sid=VT#Consumption>

## ENERGIZING PROSPERITY RECOMMENDATIONS

- 1. Reduce the Cost of Electricity:** Given Vermont's very high electric costs at rate premiums 40 to 50 percent above national averages and our emphasis on a low carbon footprint, *Campaign for Vermont* believes policymakers should prioritize long term access to clean, affordable, reliable electricity generated by nuclear, large scale hydro and natural gas. Supplies of all three are in close proximity to Vermont with access to nuclear from the New England grid, large scale hydro and nuclear from Canada and natural gas from the Marcellus and Utica shale reserves in Pennsylvania, New York and the Province of Québec. While Vermont is surrounded by these abundant resources of relatively clean, inexpensive electricity, our current public policy prioritizes the development of expensive renewable sources of electricity (solar and wind), which cost three to seven times more than current wholesale rates. Regarding Canadian hydro, *Campaign for Vermont* recommends that the State of Vermont work with the other New England states and eastern Canadian provinces to increase transmission line capacity, the lack of which now prevents any large, new power contract capabilities. Regarding nuclear, *Campaign for Vermont* recommends that the State of Vermont keep an open mind to new contracts with nuclear power producers, maintaining high standards for cost, environmental impact, and reliability. Regarding natural gas, *Campaign for Vermont* recommends the development of natural gas powered electric generation plants in areas of high demand, such as Chittenden County and that supply pipelines be extended from Burlington and/or New York to instate areas of high demand. Further, state leaders and regulators should stop burdening electric rates and ratepayers with costly programs that subsidize some at the expense of others. At most, participation in such efforts should be consumer driven, like Cow Power, where those willing to pay higher rates to support in-state renewable or the cost shifting of rate burdens have the option. Pipelines, transmission lines, a renewed openness and public sector self-constraint - these are the "roads" to low-cost, clean energy that will empower Vermont consumers' economic choices and, through them, Vermont prosperity.
- 2. Increase Access to Natural Gas:** In addition to being a viable fuel for producing low-cost electricity, natural gas is rapidly emerging as a low-carbon alternative to oil for heating and transportation needs. Yet, only a limited geographical area of Vermont has direct access to natural gas via pipelines. There is no natural gas pipeline from New York to Vermont, and the Canadian pipeline runs only as far south as Burlington. As noted above, *Campaign for Vermont* recommends extending pipelines from Burlington and/or New York to instate areas of high demand.
- 3. Reduce (or eliminate) Regulatory Barriers Confronting Power Developers and Consumers:** As noted above, natural gas distribution requires pipeline expansion to populated un-served geographical areas of Vermont. State government officials should support natural gas pipeline expansion, as well as innovative efforts to transport natural gas by other means. Provided natural gas prices stay low over the long term as predicted, informed consumers will convert from petroleum to cleaner more affordable natural gas.

Access to hydro power from beyond Vermont borders will require new and improved transmission infrastructure so that higher volumes of power from the Province of Québec and the Maritimes can be distributed to New England. A strong New England economy is vital to a

vibrant Vermont economy. Several routes have been proposed; long, high-power transmission lines are not prohibitively difficult or costly to build but can be a political challenge. Together, the New England states and eastern Canadian provinces could speak with one authoritative voice to promote the development of new transmission lines necessary to provide citizens with low-carbon, low-cost energy.

State government must reform a regulatory process to leverage conversion to cleaner, lower cost power. For example, *Campaign for Vermont* is aware of a manufacturer located in the central Vermont area that would exchange its fuel-burning furnace for a much cleaner-burning system but for the need to obtain an amendment to their environmental permit. The permit application has not been filed for fear of local opposition that would result in an expensive legal battle making the switch cost prohibitive. *Campaign for Vermont* affirms the need for prudent regulatory oversight, but calls on policymakers to refine regulations to eliminate obstacles for more economically and environmentally favorable alternatives. The recovery from Tropical Storm Irene illustrates with clarity that if policymakers prioritize and partner with the private sector, much can be accomplished.

4. **Promote Cleaner Transportation and Home Heating Fuels:** Natural gas and electricity are potential alternative fuel sources for Vermont's residential and commercial heating and transportation needs. Such options should be more accessible to our citizens. Given Vermont's rural character, Vermonters are unlikely to materially limit their driving; nor, given our climate, tolerate uncompetitive heating costs. It will be difficult, however, to encourage consumers to forsake oil-based heating and transportation fuels, which now occupy 47 percent of Vermont's total energy consumption, if Vermont's electric rates are among the highest in the nation and there is limited access to natural gas.
5. **Reduce Subsidies for High-Priced Electricity:** Vermont's Feed-In-Tariff policy relating to renewable energy development should be capped at the 8 MWh level already implemented and expansion to 50 MWh should be abandoned, otherwise this policy will cost ratepayers an estimated \$17.3 million or 2.2% in higher rates. The further expansion recently passed by the legislature in accord with their 75 percent renewable energy goal in 20 years should also be rescinded. Also, state policies relating to financial subsidies for the Feed-In-Tariff and Net Metering should be linked to market prices, not the cost of power production. Vermont's residents and businesses already pay among the highest electric rates in the country and the PSB should be allowed by the Governor and legislature to chart a better course, as their core mission requires, making Vermont more competitive, not less competitive regarding electric rates.
6. **Energy Efficiency and Conservation:** Public decision makers should design policies that allow for choice and flexibility within energy markets that lower energy costs and further reduce Vermont's already enviable carbon footprint. Such efforts could include:
  - Discourage the use of peak electricity which is generally the most expensive on the wholesale market and encourage residential and commercial uses in the off-peak.
  - Develop transportation infrastructure that supports electric and natural gas fueled motor vehicles provided these fuels are cost competitive with current fuels.
  - Reduce inefficient vehicle idling by encouraging "staggered work hours" in downtown areas where traffic jams result in the inefficient use of fossil fuels.

**7. Streamline Existing Bureaucracies and Help Low Income Vermonters:** Vermont's government operates an array of energy-related programs. These programs should be evaluated for efficacy and where appropriate consolidated.

- Low Income Energy Assistance Program [http://dcf.vermont.gov/esd/fuel\\_assistance](http://dcf.vermont.gov/esd/fuel_assistance)
- Weatherization Program <http://dcf.vermont.gov/oeo/weatherization>
- SPEED Program <http://veppi.org/>
- Clean Energy Development Fund  
[http://publicservice.vermont.gov/energy/ee\\_cleanenergyfund.html](http://publicservice.vermont.gov/energy/ee_cleanenergyfund.html)
- Efficiency Vermont <http://www.encyvermont.com/Index.aspx>
- Solar Energy and Net Metering Tax Credits  
<http://www.state.vt.us/tax/pdf.word.excel/statistics/2011/expenditurereport2011.pdf> (search solar)
- Other Funding Streams Supporting Energy Alternatives  
[http://finance.vermont.gov/sites/finance/files/pdf/state%20budget/tiger\\_Energy\\_final.pdf](http://finance.vermont.gov/sites/finance/files/pdf/state%20budget/tiger_Energy_final.pdf)

Together these programs require 100 million dollars of funding each year and the consolidation of these funding streams under the DPS would garner administrative savings, enhance coordination and provide greater value to citizens who rely on these benefits. Further, centralized administration can better assure that the focus and results of these programs will be measured and consistent with the intended policy recommendations cited above.

Vermont's rate base, a regressive mechanism of revenue generation, should not be leveraged further as a source of investment or venture capital. Given the regressive nature of the rate structure, it is appropriate to modestly use the rate base to help low income Vermonters meet their energy needs. Limited access to the rate base to fund programs like Efficiency Vermont are appropriate, provided such programs focus almost exclusively, on an all-fuels basis, to help low income Vermont consumers participate in lowering energy costs with capital investments in conservation or lower cost fuel technologies. Such charges to the rate base should be capped at \$40 million dollars, which is the current funding for Efficiency Vermont.

## **In Conclusion**

This document is meant to encourage public discussion about consumer-empowered transition to low-cost, low-carbon energy. It may also be viewed by visiting *Campaign for Vermont's* website, [www.campaignforvermont.org](http://www.campaignforvermont.org) and clicking on the link to Energizing Prosperity.

*Campaign for Vermont Prosperity, Inc.* welcomes your feedback; please email your comments to us at [info@campaignforvermont.org](mailto:info@campaignforvermont.org).