

Testimony by Guy Page, Page Communications  
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Vermont Senate Natural Resources & Energy Committee

By way of background I am a Burlington/Colchester native and UVM graduate. I operate Page Communications from my home in Berlin. I was a newspaper editor/reporter/publisher for 25 years, and a fulltime clean indoor air advocate with the Lung Association and the Coalition for a Tobacco Free Vermont when we helped pass smoke-free workplace and bar legislation of 1986 and 2002. My energy credentials include last nine years as communications director with the Vermont Energy Partnership, last three years as a coordinating committee member of the Consumer Liaison Group for ISO-New England, and last two years as Vermont media consultant for Divestment Facts. I also am developing, for a client, an in-depth study on challenges and pathways to expanding home ownership in the City of Burlington. Today I represent none of these organizations or clients. I speak as one concerned fellow Vermonter seeking to inform others.

A couple years ago I sat in a roundtable discussion group convened by Asa Hopkins of the Department of Public Service about how to implement the Clean Energy Plan. One person at the table defended a hotly contested renewable power strategy by uttering these words, “the masses must be driven.” I responded somewhat impulsively, “do YOU like to be driven?” The answer was a baffled “no” and I said then why would you want to drive anyone else. Forcing Vermonters to accept something they find harmful, unwise and too expensive not only violates the golden rule that underpins our Constitution and state law, it just won’t work. They won’t do it. Precious time, human capital, and money is wasted. A good example is the municipal and local and state electoral backlash against ridgeline wind. I contend it is both more responsive and in the long run more effective to offer creative tools that will motivate and empower Vermonters to use cleaner energy, and less of it. Real change happens when the masses drive themselves to a clean, prosperous energy future.

I believe [S.21](#) and S. 51 won’t work because both place too heavy burden of “require” and compliance. For example, S. 51 says “ANR shall encourage or require stationary sources of air contaminants to increase the efficiency of their energy consumption or use renewable energy.” Imagine the non-compliance and the squandered social capital for positive environmental change if, as a result of S. 51, large numbers of Vermonters are required against their will to replace their primary heat source. And if the Legislature mandates solar panels atop of every large building, I expect even more resistance – years of it. Too much stick, too little carrot.

By contrast, the proposals below will not, to use Sen. MacDonald’s words, “stir the pot” of public pushback. Instead they give options. They empower. They make sense.

### **First, the Biggest slice on the emissions pie chart – Transportation – 45%**

First, what *won’t* work - a regional Transportation Cap and trade, along the lines of RGGI, would just take Vermonters’ money and send it out of state. In RGGI, Vermont is a zero-FF power-

generating state, so we get money from the other states that do. It's a sweet deal. But not so for transportation, Vermont is a high-per capita FF consumer. I don't think we should make Vermonters pay extra for FF, but to do so and then send that money out of state is even worse.

**Electric Cars:** Sticker sense may soon replace sticker shock, and soon. Last April 28, I spoke with a Brian Cunningham of DOE's electric car battery research team. He said – with scientific caution and qualifiers – that an EV cost-equivalent with internal combustion may be ready for market by about 2022. It won't need a quantum leap forward, just improved design and materials. While waiting for market parity, the Legislature can:

- 1) continue to develop charging infrastructure at the current level
- 2) Offer a tax holiday for electric vehicles
- 3) Begin development of a fair EV user-based alternative to the gas tax.

**Mass transportation:** Long commutes and single-occupant traffic jams are a recurring two-fer waste of human productivity and fossil fuels. Two solutions: improve mass transit access and fuels, and heighten real-time awareness of ride-share and carpooling.

This past October CCTA merged with GMTA to become GMT, by far the state's largest mass transit organization. Minutes of last year's GMT meetings shows them trying hard to add cleaner buses and at least maintain new ex-urban routes. You can help with both.

*New routes:* The three-year, 100% grant for the Jeffersonville - Burlington commuter ends this year. Two beneficiary towns, Jericho and Underhill, were unable to set aside \$9,000 each as a good-faith "match" for continued post-grant operation, and now must ask voters for the funds. GMT said it will engage in a educational campaign. Proposed action: Chittenden County senators can write letters of support to the Jericho/Underhill newspapers ([news@essexreporter.com](mailto:news@essexreporter.com), [mtgazette@earthlink.net](mailto:mtgazette@earthlink.net)), and co-ordinate with town officials to speak at informational meetings, etc.. Also, they could ask towns seeking state/regional funding to ask residents to be volunteer drivers for VA and GMT "citizen driver" to deliver patients to doctor's appointments.

*Cleaner buses:* Protera, an electric bus manufacturer, brought a demo bus to UVM last March. At the REV conference last year the Protera representative told me they planned to talk with GMT about buying a Protera bus, hopefully financed by the Volkswagen settlement. At its October meeting, [GMT chose to buy a greater number of diesel buses](#) rather than a smaller number of more expensive compressed natural gas (CNG) buses. It was a somewhat regretful tradeoff. However a CNG subcommittee said the next bus purchase may focus on electric buses. Proposed legislative action: let GMT know it is open to a VW-based electric bus financing proposal.

**Car Sharing:** Also, the Go Vermont! car share, ride-share, commuting network can be made more robust at no extra cost if green transportation-minded NGO's will promote the program and actual ride availability with community newspapers, public access TV, radio and social media. This is a no-cost win-win-win: media develop another reader/viewer niche, NGO's get

increased visibility and legitimacy, and Vermonters get better informed about real-time choices for alternative transportation in their community. The Go Vermont! representative at a statehouse coffee last week said they do not engage much with local media, relying mostly on their own social media. Proposed legislative action: call a meeting of Go Vermont!, other pro-renewable transportation groups, and VPA Pres. John Flowers of the Addison Independent ([johnf@addisonindependent.com](mailto:johnf@addisonindependent.com)). Make the ask, and get their buy-in, including an update in three months.

**Bicycles:** reduce emissions in the urban core by increased access to bicycles. A “pilot” urban bicycle sharing system such as Boston’s [Hubway](#) needs bikes, racks, and locations. This talks is well-suited for a B-Corp established for the purpose, co-financed perhaps by UVM and pro-renewable lenders/grantors (e.g. Lintilhac Fund). As for rack locations – I know at least one Burlington developer who would be receptive. Also, Winooski Mayor Seth Leonard at the Vermont Mayor’s Caucus last week said his city wants relief from double-taxation of its municipal garage. Proposed action: grant justifiable tax relief with the condition the garage hosts the racks onsite, gratis. The racks might also reduce traffic in downtown Winooski.

### **Second slice of the pie chart – residential/commercial heating fuel – 22% of emissions**

Enforce existing building codes. Right now enforcement is uneven and builders don’t like it. Last year I visited the VT Homebuilders and Remodelers board with my brother in law Mark Groleau of Groleau Construction in Barre. I asked if greener building codes would be a good idea. No, they said, many new home-buyers expect and will pay for extra efficiency. But government inspection of existing codes is hit and miss. Enforce what’s there and efficiency will improve. Pick the low-hanging fruit first. Proposed action: in oversight capacity, recommend better enforcement to appropriate state, local agencies.

Fast track development for energy-efficient, affordable housing. California Gov. Jerry Brown last year sought (unsuccessfully) for “of right” development approving efficient, affordable housing in zoned urban areas by administrative review only, bypassing the design review board. Gov. Brown, Michael Renner of WorldWatch in his 2016 toolkit book Sustainable Cities, and President Obama in his 2016 White House affordable housing toolkit, agree: the length and uncertainty of design review kills good, needed new housing projects. Proposed action: determine if [Gov. Brown’s plan](#) for “of right” development would suit Vermont’s new housing needs, especially in the urban core. Promote pilot “of right” conversion of hideous “zombie lots” to high quality housing.

**Further incentivize clean-burning wood heat.** We can do more. We have embraced Vermont food from field to table, let’s embrace Vermont heat from forest to home, be it gasified furnace or pellet or wood-chip burner. I heard DOE Secretary Moniz tell a 2014 energy summit at Middlebury College that each state must find its own best way to clean air, using its own assets. [Vermont is 78% forested, with 4.5 million acres](#). In Australia planting trees is the major carbon sink strategy. Vermont could add significant acreage for a sustainability two-fer of carbon sink and source of cleaner, renewable fuel. Possible actions:

1. Consider enhancement of *clean wood heat rebates*. One modest proposal: dedicate the [\\$1.9 million in the CEDF/ARRA fund](#), now ticketed for solar and wood renewable projects, to wood only. Also, portions of the VY settlement could fund clean wood heat.
2. Ask Gov. Scott to task the [Governor's Council on Energy and the Environment](#) to work with state foresters and/or the forest industry to *inventory forestable land* and develop a plan to maximize carbon sink and harvest potential.
3. *Co-generation* – Burlington is considering sending steam from the McNeil plant to heat large buildings in the city. Support co-generation, when it's affordable.

**Incentivize battery storage and cold-weather heat pumps**, consistent with developing technology. The challenge of these technologies is the “new” factor and the high purchase and install price. Gov. Shumlin was pretty good at alerting the press when GMP unveiled new battery programs. In late November I asked Gov.-elect Scott how new tech would get us to 90% renewable. He cited battery projects by an Edison company, and by researchers in Boston. I did some research and found a [2016 DOE](#) program to improve transmission grid battery storage, including projects by Commonwealth Edison in Chicago and Fraunhofer in Boston. Proposal: Co-operate with utilities, Public Service Dept. to offer more incentives and information. And recognize that like EVs, the technology may not be “there” yet.

Recognize that **fossil fuel dealers want to promote cleaner choices**. They are offering them! Furthermore, they quietly provide assistance to low-income, needy consumers – that's a valuable, private sector buffer against energy insecurity. Do not punish their customers with higher prices and bans and them with tri-annual litmus tests, which are onerous to administer and foster planning instability for industry. I am haunted by the story of the girl in the cold mobile home. Proposal: engage the Vermont fuel industry as partners, don't treat them as the problem.

And finally: I offer two “niche” ideas that reduce emissions, create green jobs, and add real estate value, with little negative financial impact on Vermonters or state funding:

- Replace zombie lots and poorly-functioning mobile home parks with landscaped PUDs of attractive, ultra-energy efficient “**tiny houses**,” such as developed by [Norwich University](#). This is suitable for both urban in-fill and rural development. In general, families are getting smaller and are willing, according to a prominent Burlington developer, to swap smaller living spaces for socially attractive, energy efficient homes with modern amenities.
- **Green roofs** are as yet under-appreciated in Vermont. Growing vegetables on a “green roof” scores a veritable hat trick of sustainability goals: superb energy efficiency, stormwater reduction, and locally-grown food. When I was a roofing contractor, I wanted to develop this niche couldn't find anyone who did it, but there are more installers now. See [Michigan State University website](#) for scholarly treatment on rooftop vegetable

gardens at our latitude. Possible action: 1. Imitate the [Washington DC green roof rebate program](#). 2. Promote green roof benefits and current [education](#) opportunities on state Ag and Economic Development websites.

### **Third slice of the emissions pie chart - Electricity – 11%**

**Consider another nuclear power “buy”.** At present nuclear power comprises about [14%](#) of Green Mountain Power’s portfolio. It is affordable and as zero-carbon as hydro, wind and solar per kw/h, according to the U.S. EIA. GMP acquired with the CVPS merger an ownership share of Millstone. [The Jan. 24 Hartford Courant this month reported that Millstone is seeking new customers](#). In 2015 VT utilities signed two PPAs with Seabrook, both scheduled to run through 2034. Proposal: ask utilities to consider buying more nuclear power.

**Prioritize municipal hydro** – the 1 million kw/h Morrisville Water & Light Dept. dam on the Green River Reservoir may be because ANR wants the reservoir drained less to protect aquatic species. Some accommodation is needed to keep that dam, and others like it, in operation.

**Investigate power from the New England Clean Power Link** – the NECPL is a proposed 1,000 MW high-voltage, direct current underwater and underground cable project, delivering Quebec hydro-electricity primarily to Southern New England. It recently received DOE, ISO-NE, and Vermont Public Service Board approval, and is scheduled for operation by 2019. At a FERC hearing in Burlington in 2014, I asked a company official if Vermont utilities could buy some of the power. Absolutely, he said. Weeks later I was told by a transmission official our utilities don’t want more big baseload power contracts, preferring to invest in distributed power. Proposed action: determine availability, cost, available power from possible NECPL contract.

Growing demand for cheap overnight power to charge home batteries and electric cars may make attractive a **“third shift” power contract** for low-carbon power with Hydro-Quebec. At present our power line capacity is “maxed out” during the first and second shifts (speaking in general terms), but the low-demand “third shift” hours still have some capacity. Furthermore, Quebec has said in plain terms, through a three-nation North American pact last summer, and through a recent mammoth power deal with Ontario, that it has power is for sale. Proposed action: seek DPS, utility advice on advisability, timing, and likely cost of this power buy.

And finally, Vermont must realize the foreign policy implications inherent in the name of the problem it seeks to solve: “global warming.” Vermonters, and certainly the nation, are leery of throwing themselves “once more into the breach” of financial and lifestyle sacrifice if the rest of the world is hanging back, watching and sipping coffee. Notably China and India are held relatively harmless by international agreements. Through our congressional delegation, our climate change leaders like Bill McKibben, and National Conference of State Legislatures, of which [Curt McCormack is the Vermont representative on the energy task force](#) and a Massachusetts legislator chairs the international relations committee, Vermont could show true world leadership by putting ESG (Environmental/Social/Governance) pressure on China and India. Not only would Vermonters feel less singled out, they might also better understand how

the developing world also faces difficult decisions – for example, South Africa’s biggest coal generating plant is owned by the largest primarily black owned and operated company, a member of the Vermont treasurer’s office told me last week.

In sum, the path to cleaner air needs fewer mandates and more ideas and leadership. The masses won’t be driven. But the people are waiting to be led.