

Climate and Justice Alert
12/8/22

This legislative session that begins on January 4, 2023, and concludes in May/June 2024, is going to be critical for Vermont's drive to significantly lower carbon emissions sustainably and equitably. Alone among the New England States, Vermont has actually been losing ground; our emissions have gone up rather than down.

We know that our biggest emitters of carbon dioxide are from the Transportation Sector (40%) and the Thermal Sector (47%). And we know that as we electrify our vehicles and buildings, the demand for electricity from renewable sources will increase dramatically.

So first let's consider the Transportation Sector. Already Vermont has signed on to the Clean Cars and Trucks II Rule, following California's lead to ban the sale of fossil fuel-powered cars and light trucks after 2035 and placing increasing restrictions on heavy trucks through to 2050. In Vermont, we have in place state and federal incentives to purchase certain electric and hybrid-electric vehicles. Programs are rolling out to electrify our buses and make public bus routes more accessible and free of charge. There are funds available now for EV chargers in public places and rental properties. As the legislature considers the Transportation Bill and other related bills, we need to advocate that low-income people have access to these programs. And we need to advocate for safe streets and good sidewalks for walkers and cyclists, and bus shelters for riders.

Secondly, let's look at the thermal sector. Two issues stand out, natural gas and fuel oil. The problem with natural gas is that it is an emitter of greenhouse gases from wellhead to furnace. Gases include carbon dioxide from burning, and methane (80 times more potent than CO₂) from leaks all along the system. Some point to so called Renewable Natural Gas (RNG) from landfills, and bio-digesters that process food and animal waste and the like. But processing in this way is energy intensive and still results in methane leaks. A better way to get rid of the methane from these sites is to burn it on site to generate electricity and send that electricity right into the existing grid. It is also important to note that the amount of RNG available to Vermonters is less than 5% of the mix. RNG and natural gas, in general, are not the answer to heating our buildings. (Editor's note: During a recent national IPL conference call, it was noted that "having a gas stove is similar to having an idling vehicle in your kitchen.")

Many Vermonters use fuel oils to heat their buildings - the most carbon intensive heating fuels after coal. One solution offered is to substitute increasing percentages of "responsibly"-sourced biofuels to a fuel oil mix while consumers weatherize and switch to heat pumps and geothermal sources. But biofuels have several problems. First and foremost, the sources of these fuels are largely from crops such as corn, sunflower, palm, and others that are also used for food. Thus, using them for fuel drives up food prices and availability during a time of severe food shortages worldwide. And many of these crops, such as palm, are being planted where forest once stood reducing the planet's ability to naturally sequester carbon. Add processing and transportation and the costs go up even more. Clearly, biofuels are not the answer to heating our buildings either.

Some of us heat or supplement our heating systems with wood stoves or biomass such as pellets. This raises the issue of particulates in the air and deforestation at a time when we need forests to

process our carbon dioxide from burning. It is said that it takes up to 80 years for a tree to regain the efficiency it had when it was cut. We need to increase forest coverage in Vermont and worldwide, not cut it down. Increasing our use of biomass is not the answer.

The **Clean Heat Standard (CHS)**, that was vetoed last term had some flaws including dependency on bio-fuels, bio-mass, renewable natural gas, and questionable accounting procedures that all garnered opposition. We need to advocate for a better CHS that addresses these issues.

So what do we do to reduce our carbon footprints? A simple answer is to weatherize, strengthen building codes to enforce construction of efficient buildings, and switch to electricity for our heating and transportation sectors.

However, according to the *Energy Action Network*, right now, we are depending heavily on out-of-state energy such as from Quebec and other hydro (62%), nuclear (26%), and the New England Systems Mix (2.7%). Only 5.4% of our electrical energy is generated in-state, and only 2.7% is solar. The Intergovernmental Panel on Climate Change (IPCC) mandates that all new energy meet the principal of *additionality*, meaning it must be from new sources. According to their own reports, hydro electricity from Quebec Hydro is now “fully subscribed” so there is no new hydro available from them unless they build more, or we buy REC’s that are not actually from sustainable sources. That will also be expensive, hydro is not as clean as claimed and certainly not just, having inundated thousands of acres of tribal lands.

So where are going to get it?

The Global Warming Solutions Act, passed in 2021, mandates that Vermont meet carbon reduction benchmarks in 2025, 2030, and 2050. Some legislation has been passed, and some programs and funds are in place to help us transition to electricity for heating and transportation.

Funds are already available to weatherize buildings, and more needs to be spent to equip our technical high schools and colleges to train workers for the emerging fields of weatherizing, conducting building energy audits, installing heat pump and geothermal systems, and working in solar and wind, and electric vehicle repair. And we need to stop advising every young person to attend college when these newer trades are needed, many would do better, making good livings.

As we weatherize and construct more efficient building and drive electric vehicles, we need a new **Renewable Energy Standard (RES)**. Passed in 2017, it mandates that at least 5% of Vermont’s renewable energy be produced in-state. (We’re presently sending 75% of our energy dollars out of state.) A revised bill under consideration would raise this to 10% by 2025, 20% by 2030, and so on. The bill must require that all energy comes from solar and wind in Vermont and from the New England System, and it needs to incentivize community solar and roof-top solar projects that build resiliency and directly benefit Vermonters. And all systems need to include battery storage where feasible.

Finally, the RES must exclude any new energy from Quebec Hydro, and Vermont utilities need to stop greenwashing their energy mix with REC’s and other devices. We need to advocate for a

revised Renewable Energy Standard. Baked into all of this is the imperative to speak up for lower income and marginalized people and our workers so that they share in a sustainable future.

This all requires that we stand up to demand a better future for all Vermonters. It means actively paying attention, learning with and speaking to the people we send to Montpelier and Washington. Join advocacy groups such as VT IPL, Vermont Sierra Club, VPIRG, 350VT, Rights and Democracy (RAD), and check out “Climate Dispatch” published each Friday at vermontconservationvoters.com.

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