# H.289 – Facts to Be Aware

While opinions and articles supporting updates to Vermont's Renewable Energy Standard (RES) under H.289 often focus on how good the changes to the RES sound, there is a fair amount of erroneous information being floated and little discussion about the significant unintended consequences would likely be created. Some items that deserve awareness as our legislators consider H.289 are as follows:

- **Being renewable does not mean that an electricity source is carbon-free.** With current technology, H.289 will leave us with landfill gas and biomass as the only baseline renewable power sources that can provide power 24/7 365. **Does it make sense to reduce hydro and remove nuclear, by far our two largest carbon-free baseline power sources, as options in times of rising energy demand and costs?**

- 2%. Vermont's electricity sector produces 2% of Vermont's total greenhouse gases – the least intensive electricity sector of any state in the U.S. Meanwhile, the transportation and heating sectors produce a total of 72% of Vermont's greenhouse gases. **Shouldn't our primary efforts focus on expanding lower cost energy to address beneficial electrification instead of spending $150-$600M trying to reduce 2% of emissions?** We need to be enabling beneficial electrification in transportation and heating, not reducing our source options while raising electricity rates.

- **I have seen no discussion as to what percentage of carbon-free energy sufficiently reduces greenhouse gas emissions.** Is it 90%, 95%, 100%? Perfection is easier to mandate if the mechanics of what is involved to accomplish it is not carefully examined. Achieving 100% carbon-neutral electricity has never been done at a large scale outside of regions with sufficient hydro or nuclear power. **Many of the systems we implement today may not be the standards of tomorrow; it is short-sighted to lock us into them by legislative dictate of 100%.**

- H.289 places more reliance on Renewable Energy Credits(RECs) to purchase power from the ISO-NE grid. **We should not live under the illusion that because power is bought with RECs it reduces greenhouse gases.** RECs are a human construct that can mask the reality if not used carefully.

- Large scale, long-duration energy storage solutions, which would potentially make solar and wind better able to supply power year-round in Vermont, have yet to be established**. While solar and wind should be part of Vermont's energy portfolio, is there wisdom in forcing the majority of our eggs into the technology that is currently least able to fulfill demand when we need it most in Vermont (winter)?**

- In the face of powerful trade organizations that shape the future policy they will have to follow, utilities are cautious to vocalize concerns about net-metering, grid challenges, and the prospective rate and reliability issues H.289 will likely exacerbate. **Unless the goal is to raise electrical rates and increase the likelihood of blackouts, utilities need to be empowered to adapt and secure contracts as efficiently as possible to meet the massive changes they face, not further hamstrung by restrictions and favoritism.**

- H.289 advocates often proclaim that it will reduce emissions equivalent to 160,000-250,000 gas-burning cars. **The largest utility in the state, Green Mountain Power, currently shows 0% of its power coming from oil & natural gas (0.6% before RECs).** It seems unlikely that Vermont utilities would suddenly start prioritizing fossil fuels to meet future demand if H.289 is not enacted.

- The broad range of estimates to implement H.289 demonstrates how little we actually know about the cost. Related, the costs of unintended consequences go well beyond dollars. **Without affordable long-duration storage (technology that currently does not exist), H.289 almost guarantees an increase in greenhouse gas emissions.** More power from the ISO-NE grid and biomass will be needed to fulfill peak demand when the sun is not shining and the wind is not blowing.

- As ethanol, RECs, and net-metering demonstrate, modifying mandates as times change can be nearly impossible. **Mandated favoritism of specific sources of energy at the expense of others stifles innovation and potentially backs us into a corner by removing diversification from our energy portfolio.**

Legislation to mandate incentives and technical solutions rarely stands the test of time. Because of political pressure from trade interests (lobbyists), it is difficult for legislatures to modify approaches that may have once served a purpose but become obsolete. **The 2015 Renewable Energy Standard constructed a visionary goal. Vermont utilities were given overall targets to achieve and, for the most part, have embraced them. The logic of placing additional conditions on how these ambitious targets are achieved should raise the question of what is actually intended and who will really benefit from H.289.**

While our small population may entitle us to the privilege of playing power generation favorites, the other 99.8% (645,000/335,000,000 = 0.2%) of the nation's population requires more powerful and diversified energy solutions. **An isolationist approach to energy sends the wrong message, dismisses the necessity of energy diversification, and is disingenuous to the claimed values and goals of reducing greenhouse gas emissions and air pollution.**

**It is time to think critically and to be aware of the likely unintended consequences and precedence of bills like H.289.**

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