

For the sake of our children and grandchildren, we have a moral responsibility to make Smart Choices today for creating a future with energy security that is robust, environmental appropriate and delivers the least cost beneficial electrification possible.

How will VT get to 10 cent or lower kWhs and meet the above metrics?

Getting to least cost kWhs with new technology is possible, if we switch from centralized generation and transmission of electricity to decentralized community owned micro-grids with local and renewable generation and storage in which every producer is a buyer and seller. This will require the PUC to make some significant adjustments.

My goal, as a member of Peacham's energy committee, is to help Peacham meet the states environmental goals, as well as make it possible for all Peacham residents to buy electricity at the least cost per kWh. I recognize that significantly reducing transmission requirements will render centralized power plants "stranded assets", regardless of technology. Do we really want to subsidize and invest in stranded assets?

Vermont, however, has an opportunity to take advantage of recent and emerging concepts and technologies that would benefit all Vermonters. Vermont could choose to create The Vermont Department of Strategic & Beneficial Electrification to promote and coordinate the rapid implementation of:

- EV adoption
- PV and other distributed renewable energy technologies
- Town owned micro grids and energy systems
- Local storage
- V2G - Vehicle to Grid (leverage 90,000 EV batteries)
- V2H - Vehicle to Home
- EV charging stations at price points lower than gasoline
- Hybrid hot water heaters
- Cold Weather Heat Pumps
- Weatherization of all buildings
- etc.

Presently, I see no unified approach to Strategic and Beneficial Electrification in VT. Fragmented, piecemeal and siloed approaches will never get us to the future we want to create as our legacy.

Take the case of the PUC. It has a stated goal of providing Vermonters with the best price for reliable electricity. From the PUC web site "The Commission's mission is to ensure the provision of high-quality public utility services in Vermont at minimum reasonable costs, consistent with the long-term public good of the state". A key question is what is a public utility in the 21st century? Is it centralized? Is it the principal source of energy or do our present utilities transition to function as the back up source, systems integrator and network administrator?

It appears that the PUC is NOT yet actively encouraging town energy production, micro grids and local storage. The PUC's current "preferred siting" limits make it very hard for a town to generate its own electricity for its citizens. The 50% on site use rule is a killer.

It will also be necessary to allow the installation of renewable energy on lands that are no longer used for agriculture. Peacham has lost over 90% of its farms since 1950. Much of this formerly agricultural land, now abandoned, has reverted to forests. We can not afford to lose our mixed landscape. Thus we must find uses for open fields with no or minimal agricultural use that will keep these fields open and economically productive. Open land that is cash flow negative is apt to quickly revert to forests.

If we want to stimulate community owned power systems, we have to make sure that if community PV is installed on land formerly used for agriculture that there is an incentive at least equivalent to Current Use as Ag land benefits.

Additionally, we must make it legal for at least town energy plants to sell power across property lines. For an optimal energy economy, we need real time buy and sell options for ALL power producers, including home owners.

As a result of the current restrictive set of preferred sites, as illustrated above, the PUC is actually a barrier to the state meeting its environmental goals with respect to CO2 emissions, much less the goal of delivering the least cost, environmentally appropriate, robust beneficial energy security to all Vermonters.

If we have the courage to abandon 20th century power concepts, there is a whole new world of fresh ideas and exciting opportunities to discover and or invent that will benefit all Vermonters.