

Dear Committee,

Thank you for allowing me to speak with you today. My name is Mike Roy, and I currently serve as the chair of the Middlebury Energy Committee, and as vice chair of the Climate Economy Action Center of Addison County. I have lived in Middlebury for the past 18 years.

I appreciate the opportunity to be here today to share a bit about our work in Middlebury and Addison County. Some of what we are focused on in the moment might not directly speak to legislation currently being developed by your committee today, but knowing your committee has jurisdiction over climate mitigation solutions, climate resilience, land use and other critical conservation and environmental issues, I welcome the chance to share with you the sort of climate work happening on the ground at the municipal level and county level. I'll speak mostly from the Addison County perspective. But, as you might know, our work in Middlebury on the energy committee is not unique. About ½ the towns in the State of Vermont have mostly municipally appointed climate and energy committees. These committees are working to help the municipality itself... and all the people in it... reduce their energy bills, cut energy consumption and transition to cleaner, more efficient, and more resilient energy and climate solutions. Our work, however, especially in this moment with significant federal changes, has become harder – and more important. State level policies and resources that help, not hinder, a transition to cleaner, more affordable renewable resources are more important than ever to meet this moment that we are in; one where the rate of climate change is accelerating, and the federal government is taking an active role in dismantling federal policy to address this crisis.

I appreciate that your jurisdiction largely focuses on resilience and adaptation, but also can from time to time engage with mitigation. The work I'll describe is largely focused on mitigation. To that end, I'll start with a quote from climate scientist and advisor to the Obama administration John Holdren who wrote about climate change:

“We basically have three choices: mitigation, adaptation, and suffering. We're going to do some of each. The question is what the mix is going to be. The more mitigation we do, the less adaptation will be required and the less suffering there will be.”

I have four items to bring to your attention today.

1. Enhanced Energy Plan

We are working closely with our regional planning commission to develop an enhanced energy plan for Middlebury. In addition to creating maps for preferred solar location, we will also be setting targets for clean energy adoption (e.g. heat pumps and EVs) that link up to regional plans which in turn feed into targets for the state to reach its emission reduction goals. In the spirit of the old saw that you can't manage what you can't measure, we will need much improved systems for doing the accounting in order to understand whether or not we are making sufficient progress on our goals. The bill that looks to fund a carbon accounting system for fossil fuels is a good start, and would be an important part of our local effort to contribute to the overall state goals spelled out in the Global Warming Solutions Act.

2. Wastewater Treatment Plant

Little did I know that to engage at the local level with climate and energy, I would need to learn so much about how wastewater treatment plants operate. Middlebury is in the planning stages for a major overhaul of its plant, and as part of that upgrade, will be moving away from the use of lime to treat our sludge. We will instead be drying our sludge with a very large dryer. The leading candidate is an enormous contraption that holds hundreds of gallons of mineral oil heated to over 300 degrees. The critical decision we face is how to heat that oil: with fossil gas or electricity. We can easily understand that the electrical option will produce much less carbon pollution, and so prefer the electric version. We are researching projections on how the price of gas and electricity might change over the 20 year lifespan of the project, and eager to see if solar and storage might help tip the scales towards the climate-friendly solution. State policy that makes it easy and cheap to develop local solar, and policy that accounts for the social cost of carbon, both would be helpful.

3. State-level Incentives to Switch to Clean Energy

As the federal government has taken a sledge hammer to the incentives for switching to clean energy, many states are putting in place state-level programs to allow their residents to switch to solutions that are, when looked at with a full life cycle analysis, cheaper, are healthier (no burning things inside our homes!), and contribute to an overall mitigation strategy. While we certainly understand the fiscal challenges caused by the many changes that have taken place due changes in many federal programs, in the medium term if we are in fact going to

meet this moment, we will need to heed the good advice in the climate council's latest climate action plan, and develop resources to help all Vermonters afford to make the switch.

4. Community Based Energy Coaching

Middlebury has been partnering with the Climate Economy Action Center of Addison County to launch a community based energy coaching program designed to address the "Last mile" challenge of connecting with hard to reach communities to ensure that the transition to clean energy is just and equitable. There is a bill under consideration to explore how we might expand this program to serve all of Vermont, understanding that it is a necessary but not sufficient part of a comprehensive approach to effecting a swift and inclusive transition away from fossil fuels, to solutions that are affordable and healthy (aka don't pollute).

I hope these four interconnected challenges help you get a sense of both the challenges and opportunities for meaningful action that exist at the town and county level, and the ways in which these efforts must be supported by state policy that provides resources and structures in which we can operate effectively.