

Climate Infrastructure Financing Report

Appendix B – Public Comment (Email) for AI Query

Funding municipal positions that could be shared between two or three municipalities would help address capacity issues in the Northeast Kingdom (NEK). Those job descriptions should include responsibilities related to advancing climate, energy, resilience, and sustainability goals within their communities and that are aligned with regional and state efforts.

As an organization that manages natural resources projects for landowners, CRC has noted that the bottlenecks that we run into generally are focused around lacking organizational capacity to accommodate the already existing funds that we have access to. We have multiple projects lined up based on communication that has already happened with willing landowners, and access to the funding streams to do them, but we don't have the staff to carry them out – basically managing the projects for the landowners, applying for grants, writing the RFPs and contracting with designers and construction crews. As an organization, we are desperately in need of additional funds to increase staff capacity, both in the management of projects, but also in the administrative management of those larger federal funds and the associated reporting and auditing required to accommodate them.

We have also noticed the gap in funding needed to do basic education and outreach to help landowners understand how natural resource projects can create community resilience, and how to access the funding and technical assistance to implement those projects. Many of the NGOs and watershed groups in the state are reaching out to do direct community education that can result in projects – we need additional funds to support organizational capacity around this type of education and outreach.

An additional very practical gap is that there are not enough nurseries in the state to accommodate the amount of natural resource projects that are currently being done. We need someone to be growing more native trees and bushes to supply for restoration projects.

The natural resource-based climate change resiliency work that we do is done in partnership with the local RPCs, Conservation Districts, watershed groups and other NGOs directly in relationship with local landowners who are willing to have these projects (such as dam removals, floodplain restoration, upsizing of culverts, riparian buffer plantings) done on their land. On the eastern side of the state there is a very collaborative effort to coordinate our work. We often refer a landowner to another partner that may have more expertise on a particular project, or we consolidate projects to bundle them to access funding, or if one organization does not have the capacity to take on a project, we may pass it off to a partner to manage. Information sharing is done through our DEC Tactical Basin Planners and regional check in meetings.

As a four-state watershed organization, we routinely apply for federal funds through the Regional Conservation Partnership Program, the National Fish and Wildlife Foundation, the Long Island Sound Futures Fund, etc., and we are one of the partners working to help stand up the Connecticut River Watershed Partnership Act. We are a large enough organization to cobble together multiple federal, state, and private foundation grants to provide match internally for our work, but we are in a privileged position. Most of the smaller watershed organizations do not have the internal organizational infrastructure to access federal (or sometimes even state)

funds. Developing a mechanism to pass through federal and state funding to smaller organizations without too much bureaucracy is key.

Centralizing access to federal and state funds in a way that is easy to access and flexible to use would help move the money into resilience projects more effectively. To be more effective in moving state Clean Water Fund moneys out, over the past several years the ANR developed block grants that consistently go to the same entities to distribute. This mechanism and the Clean Water Service Providers were put in place to solve the Agency's struggle with trying to get grants out and manage them, without being able to hire additional staff to do that. The process for this is better since the block grants have been established, but it is still complicated and cumbersome given the small amount of funding provided. CRC has consistently turned to relying on larger federal grants for a watershed wide approach to do multiple projects over several years, instead of applying for state funding that has to be focused on one aspect (eg. Design or implementation) of one project at a time. It would be amazing if the State could establish a pathway for block grants to be given to the partners already doing the work to use more flexibly to move multiple projects forward through multiple stages of project development. Could entities such as CRC, the Conservation Districts, and other NGOs be vetted through a preferred vendor process for the pass through of larger lump sums for work over multiple years?

1. Green Workforce Development

-Including bonus pay for weatherization workers to ensure that weatherization work pays more than other home contracting work. (This is important because folks skilled in weatherization are choosing to use their overall skillset to do easier work for the same pay. Similarly, folks skilled in home contracting see no need to gain skills in weatherization as they already have as much work as they want, at the same pay as weatherization, that is more pleasant to do than weatherization)

2. Sustainable transportation infrastructure, including bus only lanes on major corridors

3. Fare-free, expanded, electric public transportation

4. Larger subsidies at the point of sale for ebikes, as well as greater ebike marketing/advertising

5. Major expansion of EV charging infrastructure

6. Incentives for sustainable, mixed use, transit-oriented development, particularly when that development occurs on top of existing parking lots

7. Regulatory assistance for communities that adopt stronger building codes/decarbonization requirements than the state

In February 2018, Congress enacted key provisions of the Disaster Recovery Reform Act (DRRA), comprehensive legislation that created a national strategy for investing in disaster mitigation and response.

The Community Disaster Resilience Zones (CDRZs) Act of 2022 (S. 3875) requires FEMA to use data from its National Risk Index to establish CDRZs and designate communities across the

country most in need of mitigation projects. These communities would be assisted in accessing federal funding for mitigation and resiliency purposes.

1) burning wood for heat has a larger net carbon footprint than propane or fuel oil (not to mention the particulate matter pollution from burning wood) so why provide incentives for wood burning appliances? Wood should be used for construction where it will store carbon for at least another century. Discourage burning wood for heat.

2) a) if reducing greenhouse gases is Vermont's priority why are the incentives income sensitive? If the incentives were not income sensitive more people that can actually afford to buy energy efficient appliances or electric vehicles may choose to do so. We would reach our carbon reduction goals faster if the incentives were not based on income.

b) what are the current lower income ev purchasers going to do when they need to replace the battery pack or purchase a replacement vehicle? They won't be able to do either without more assistance or they will purchase a used gasoline powered vehicle that they can afford. And then we will be back to square one : producing more greenhouse gases.

c) why phase out the incentives as the the vehicles become more expensive? Incentives should be available to all no matter how expensive the electric vehicle is.

d) greater incentives to purchase hybrid vehicles would be more valuable to owners living in cold rural regions like Vermont.

3) Food for thought: I'm not sure offering incentives for heat pumps is reducing our greenhouse gases because the heat pumps are installed to reduce carbon produced from our heating systems but now more electricity is used to also cool houses, a comfort benefit yes, when those houses did not have air cooling prior to the heat pump installation and may never have installed air condition if not for the heat pump. (this happened within my household).

The Utilities in Vermont have been the winners with huge financial profits AND have largely contributed to the emissions causing climate warming. It's time to tax those profits and penalize the damage they have contributed to.

While I understand that most of the focus is on maximizing federal funding, this is a great opportunity for policymakers to be aware that it shouldn't just be taxpayers who pay to repair the damage caused by the changing climate – those Big companies that knowingly had an active hand in creation of this mess while making billions in profits should pay, too.

With regard to strategies for financing climate infrastructure, I would strongly recommend the following worthy of investment:

- supporting roof top solar with more incentives, ideally installed in local networks
- continue to support installation of heat pumps and induction stoves
- FULL support of the Weatherization program. I have worked extensively with these programs all over the country and the one here in Vermont is among the very best anywhere. They need to be able to count on long term support of both personnel and training funds.

Different states have followed different routes to finance their climate mitigation efforts.

New York State has decided to amend their state finance law to include a special revolving fund to be known as the “Climate Change Adaptation Fund.” The bill,

nysenate.gov/legislation/bills/2023/S2129

has passed the Senate and is making its way through the Assembly. They have used the standard of “strict liability”; that is, that the use of their products was responsible for damages to the environment.

California has taken a different route, filing a civil case which would create such a fund. A precedent for that route was established when several California cities sued makers of lead paint on similar grounds in order to create an abatement fund. In their version of a climate fund, the state of Maryland has determined that it has the authority to mandate that companies that do business within the state contribute. It is anticipating that many companies would sue but that the courts would most likely hold up the authority of the state:

<https://www.wmdt.com/2023/03/md-bill-would-create-superfund-for-companies-that-contribute-climate-change-with-mandated-contributions/>

And here in Vermont, a bill to create a Climate Superfund is being introduced to the Legislature. I hope that you support this and that we can join the other states in this endeavor.

As you must be aware, Vermont already has a lawsuit in the State court, Vt. vs. Exxon submitted by T.J. Donovan in 2021 and currently stewarded by Charity Clark.

Another option is filing a separate suit, based on the specific event of the July 11th flood. Precedents here include the Oregon suit around the “Heat Dome” event and the suit by 16 Puerto Rican municipalities around the damages from Hurricane Maria.

I realize that Vermont has few resources that can be devoted to litigation, especially compared to the deep pockets of the oil/gas companies, BUT possibilities exist to overcome this hurdle:

for example, contingency lawyers, pro-bono or “low-bono” lawyers, and climate philanthropists who underwrite climate lawsuits brought by states or municipalities. A great source of information about these options is the Center for Climate Integrity:

climateintegrity.org.

As these initiatives proliferate, whether in the form of legislative acts or lawsuits, Vermont can learn from other states and, as we move forward, can be a model for other states to follow.

As in the case of the tobacco industry, fossil fuel companies knew about the damage their products caused; they lied, and they now must be held accountable.

Absolutely, bad long-term planning on the part of the Wrightsville Dam players caused the flood in Montpelier this summer.

My question to you is, were they naive by failing to anticipate that the United States government would allow consumers to use a product that not only causes a range of health diseases (placing an immense strain on our healthcare system),(1) but also causes a range of "climate disease/disasters?"(2)

- Carbon tax: A carbon tax is a tax on the carbon content of fossil fuels. It would make fossil fuels more expensive, which would encourage people to use less of them and invest in cleaner energy sources. The revenue from a carbon tax could be used to fund climate infrastructure and other climate change mitigation and adaptation efforts.
- Fossil fuel subsidy reform: Governments around the world subsidize fossil fuels to the tune of hundreds of billions of dollars each year. This taxpayer money could be used instead to fund climate infrastructure and other climate change mitigation and adaptation efforts.
- Liability lawsuits: Fossil fuel companies are facing a number of lawsuits from communities and governments that are seeking compensation for climate change damages. These lawsuits could force fossil fuel companies to pay for some of the costs of climate change.
- Divestment: Divestment is the process of selling off investments in fossil fuel companies. Divestment campaigns have been successful in putting pressure on fossil fuel companies to change their behavior and to invest in clean energy.
- Public pressure: Public pressure can also be used to convince fossil fuel companies to help pay for climate change. For example, people can write to their elected officials, attend protests, and boycott fossil fuel companies.

1. Please come up with loans for green solutions to UVM MED center's need for more energy and heat THAT DO NOT involve BURNING ANYTHING. Or just keep the focus on housing per the Seven Days article on McNeil.

2. There is no excuse for allowing the continued burning of wood in Vermont at this scale at McNeil, our single largest green house gas emitter in Vermont. How are we going to meet our emission reductions in Global Warming Solutions act when strange use of words like renewable and sustainable don't apply to anything that burns. Calling them something else and not counting these emissions does not slow climate change.

3. Wood is worse than coal.

It is the MOST toxic for human health and emits huge amounts of toxic fine particulate matter and other chemicals in the low income neighborhoods of Old North End and Winooski. See attached excel spread sheet from McNeil. This is what is dumped in our air even with the Electrostatic Precipitator taking out some of the pollution on their stack. Figures on pollutants are most accurate for 2020 and 2021 before that they are too low. I ran the numbers by the State employees who monitor McNeil. The 2020 and 2021 figures for fine particulate matter are the most accurate because they started counting condensate fine particulate matter—which counts. In 2020-5.6 tons, in 2021 3.5 tons. Medical science recognizes no amount of fine particulate matter as healthy. That our top Medical Center is ignoring it's own scientists is disgusting.

3. Also do the math on the CO₂— 2021 (last full year of emissions) is
906,941,600 lbs = divide by 2,000 to get tons = 453,470.8 tons of CO₂!

Wood emits the most green house gasses per kilowatt hour of energy produced of ANY burned fuel.

CO2 is CO2 the atmosphere does not care where that CO2 comes from. It is driving the climate crisis. Which brought us all the suffering this summer of wild fire smoke and flooding and non-stop rain. We are in a crisis, time to stop burning anything.

4. The best sequester of carbon is a mature tree. Vt native trees take 200-300 years to reach maturity to call wood "renewable" makes NO SENSE.

Climate Scientists say we only have 5-10 years to turn things around and prevent the worst of climate change.

5. Time to say and act on "the emperor has no clothes" when it comes to burning anything. It makes NO sense to replace fossil fuels with renewable gas or biomass (wood) when they emit the same or worse toxic stuff and green house gasses. And green solutions that are cheaper in the long run, healthier and reduce green house gasses already exist.

Green solutions exist, IRA has huge pay back and point of sale for non-profits.

With all the tax increases we have seen and will continue to see, this is just more wasteful spending. When Vermont legislators get a grip on spending, solving its current problems (taxing Social Security and retirement benefits, crime, reasons for increasing homelessness, increased drug abuse, overdoses and so much more) then maybe we can have the conversation about climate change. In the meantime, let's be more fiscally responsible and address infrastructure issues related to severe weather events.

Another thing you should do with the IRA money for green tech is purchase battery backup systems. Like Tesla powerwalls. Then give them to whoever wants one. Doing this would be a win win win for Vermont as we already generate too much solar electricity to be used as it is collected. Giving battery backups to people would mean that we can continue to collect more solar power, convert more homes to electric heat and hot water AND not have to upgrade the grid to do so! (So I guess that is a win win win win)

As I've said before, just give this tech to people. Don't thwart efforts by trying to create rebates and tax credits. Just give it to people who will use it. Or at least scale discounts starting with !00% for people who have household incomes below the median.

Vermont is a bit off our goals because program designs loose sight of their purpose. We don't have enough republicans in legislature to worry about what anyone thinks about spending. Just use the money in the most efficient and effective way. Which is to implement the technology NOW! :)

As you dig into long-term financing strategies for funding the climate action plan, I hope that you'll consider the mechanism outlined in H.105 An act relating to the Community Resilience and Disaster Mitigation Fund.

[The purpose of the H.105](#) is to create the Community Resilience and Disaster Mitigation Fund to provide funding to municipalities for disaster mitigation and community resilient infrastructure. The bill is modeled after legislation passed by Colorado.

What this bill does is establish the Community Resilience and Disaster Mitigation Fund to award grants to municipalities to provide support for disaster mitigation activities. Those disaster mitigation measures could include things like grid hardening, slope stabilization, watershed restoration, drought mitigation, construction of emergency shelters, and similar activities that directly reduce risks to communities, lives, and property and decrease costs associated with disaster recovery. Revenue for the fund is generated by increasing the assessment on certain casualty insurance company premiums. Funding would be awarded to municipalities with priority for projects that use funding as a match for other grants, projects that are in hazard mitigation plans, and projects that are in communities identified as high on the municipal vulnerability index.

Many of our communities are not prepared for the impact of extreme weather. This bill will provide critical support that ALL municipalities, especially our most vulnerable, can access to be more resilient against future disasters and climate change. Making these upfront investments will decrease losses that would otherwise be largely paid by insurers.

While currently available resources, time and need will ultimately determine our future with regard to energy it should be up to the inventors, and users of trending technology to pay for it. It should not be placed on the backs of those that work hard, live within their means and pay their own bills.

The climate alarmists have duped Vermonters into paying for their attempt to reduce climate change. Since the beginning of time earth has had continuous changes to its climate. While some of the most recent changes have been influenced by the increased human population and their actions, much of the proposed energy changes will contribute just as much if not more to climate change and negatively impact our environment.

While the current proposals of these alarmists creates a financial cost to Vermonters that is unsustainable, the climate and environmental impacts of the many changes proposed are astronomical.

The mining of the materials needed for the production of solar panels and batteries is destroying thousands of acres of the earth's outer crust penetrating hundreds of feet into the surface. Dust and the massive amounts of toxic fumes emitted into the atmosphere during the mining and refining of these raw products alone out ways the current carbon emissions. Say nothing about the labor atrocities occurring in the countries that produce these raw materials.

The waste products of the current proposed electrification of everything are not recyclable and hazardous to dispose of. Solar farms are creating micro climates contributing much to climate change within our state and destroying our once beautiful vistas. Current battery design is a fire hazard that is killing and injuring hundreds as well as creating additional financial burdens on all.

Without a doubt there will come a time that an alternate energy source will be developed that will meet the needs of Vermonters without the climate and environmental impacts of the current and proposed energy.

1. As someone who began his personal transition in '08 by installing a geothermal heat pump system to replace my propane furnace, I strongly urge some sort of State subsidy or tax credit formula for homes to tackle such a project. It's not cheap, but a State assist will bring a larger number of converts than without the help. As to new construction of homes AND businesses, it seems some sort of "green mandate" would push those too stubborn to change or hesitant and uncertain about new green technologies. With new construction, it should be suggested that by pairing any geothermal system with solar designed into the roof, the owner will save additional money by buying less energy off the grid. Over a 5 or 10 year period, the savings of \$\$\$ and cutting greenhouse gases out of the equation will show impressive results in personal pocketbook savings AND a significant reduction in the State's climate goals of greening the Green Mountain State.

2. Routes 7, 100, and 5/10, our N/S routes, and 9, 4 and 2, our E/W routes, should be prioritized to installing strategically placed EV charging stations in preparation for EV adoption here in Vermont. Perhaps team with the Feds and come up with a plan to do the same thing on I-91, a true artery of Vermont travelers. Perhaps contracting with cafe' type businesses to occupy these charging areas to make EV stops to recharge much more relaxing and convenient for their time.

3. There are numerous Vermont roads that have significant acreage on their sides for applying solar panels for GMPC to tap into for electricity. My 1st thought in this regard is Route 7 out of Bennington going North. I dare say the miles of wide clearings along 7 would likely generate several megawatts of power if utilized. I believe the formula for solar is roughly 2 acres /megawatt, meaning, the hundreds of acres on both sides of Route 7 would generate at least 50 Mw, maybe even more than that. Now that takes a bite out of our State's carbon footprint, doesn't it?! As it is currently, this fallow land just sits there having to be mowed once or twice costing the State \$\$\$; why not employ these acres to offset these expenditures, even add \$\$\$ to State coffers. No brainer to me.

4. While the technology hasn't fully matured yet, thin layer solar is an up and coming technology that will apply solar to many latent surfaces around us in our everyday lives. Perhaps Vermont could start a pilot program employing these products and over a years time to determine if it is indeed something worth investing in. The potential of applying this product to building wall faces and bridge structure and any inanimate structure with square footage to exploit is vast.

5. Every parking lot in Vermont should have solar canopies over them. My 1st thought on this is Hospitals. With their enormous use of energy 24/7, and their very large parking lots, building parking lot canopies would bring major savings to their bottom line. But my design envisions these canopies as multi purpose, not just solar generation. With these large 'roofs over the area, You'll have large amounts of runoff during rainstorms. Instead of the rain being directed into the gutter and eventually the sewer system, the rain water is diverted into a cistern system that would supplement the Hospital's water use, thereby saving on their water bill's with their host city or town. This diversion would also have a positive effect of the city's water infrastructure and supply. Additionally, these canopies would also host EV chargers that could generate more monies for the Hospital. These canopies would also, by shading the parking areas, lower the

reflective albedo effect of asphalt parking lots "reflecting" heat into the atmosphere raising ambient air temps that make our summer days that much hotter and uncomfortable.

States can have their own banks. Start a state bank, get nh to start their own bank, loan each other money at 0.15% or whatever, and you just fractional reserve printed a crapton of money for yourselves. It is what large private universities do, and the balance sheets cancel basically.

Instead, could fund other things like keyline design which have other extremely valuable returns and which also sequester a stupid amount of carbon. In Vermont, current keyline design results add about an inch of topsoil per year, more or less depending on location. Would boost ag yields, lower or eliminate fertilizer use, and reduce runoff sharply from farms, restoring our waters and making farms more productive, and restore lost ecosystems if patches of hill farming were added to existing stock of farms. Keyline design makes that viable, and is pretty low cost. Wouldnt expand ecosystems if most hills were completely farmed, as they were 100 years ago, but some farms on on some of most hills utilizing keyline design would do that, and considerably faster than letting beavers go wild (the process before colonization) would do. We're not going to let beavers run rampant anyway though because it would trash most of our roads and lots of people's property, but some increase of them is desirable, and keyline design would facilitate that.

I suggest an idea when making climate change funding messaging easy to understand read documentation materials curriculums one pager / glossary or summary of the individual ask or the Statewide ask of stakeholders advocates community Partnership climate partnership etc moving forward so accessibility and accommodation would be helpful for individuals with disabilities and other specific learning needs.

I think this is very exciting and the perfect opportunity to design programs that work. What I mean by that is that many programs miss their goals by attempting to make participants liable for some of the cost of the products and services. In my opinion, that is a foolish way to design programs. Programs, instead, should focus on function and meeting goals. If those goals are decarbonization and efficiency, then apply the money directly to those efforts. Give everyone the opportunity to participate by making products available to them directly, without discounts, rebates, tax credits... etc..

So, if working with VT companies is important. Then give money directly to those companies in exchange for their services. For example, you could give \$1 million to a local HVAC company to install 200 heat pumps. Then the company just says to the public "hey we have free heat pumps, who wants one?" Do the same with solar installers, power storage, e bikes, electric cars, weatherization... just use the money and get it done!

I'd like to ask you to recommend creation of a climate superfund. We need large-scale action to protect people who are most vulnerable.

My husband and I couldn't have purchased solar panels without the special financing available, now some years ago. I advocate more of the same and even more help for low-income families who can benefit more from lower electric bills.

Without those solar panels, I can't be sure that I would have installed mini-split heat pumps this year. I'm counting on a lower propane bill this winter and an overall lower energy bill because of solar panels.

We also had a lot of new insulation installed, and I've replaced windows and doors. For some people, these costs would be overwhelming, yet they are money-savers over time. Assistance with such expense needs to be another route to ameliorate climate change and help people live more cheaply.

Ultimately, I think all the things I've mentioned will benefit Vermonters and the state of Vermont.

It should be noted that not all households currently have electrical service to their house. I recently built a small house in Bolton but Green Mountain Power was going to charge an exorbitant price of \$20,000 to install the power service, compounded by the fact there is a 30% state tax on new power services. This made it too expensive to do. I instead use a few solar panels to charge a couple batteries but mostly a fossil-fuel generator for my electricity.

The State should instead give a 30% tax CREDIT for new power service so my family can enjoy reliable electricity and can participate in the green energy movement, rather than using a fossil fuel generator.

The best thing Vermont can do to help VERMONTERS, is not to make our fuels so expensive! Last year we paid more for heating our house then we have Ever paid!! We have been here since 1992!!

We are not rich, and are trying to get by as best we can. Both my husband and I have fixed incomes we have tried our best to scale back so we can afford to live in Vermont, but we are getting down to the wire! There is not much left to cut!! Please please do whatever you can to help VERMONTERS like us!! Everything has gone up ! But not the amount of money we have to get by! I am all for green energy, but Sensibly spaced out so people don't get hit in the face over and over again!!

I read the article on WCAX.com about this office getting green energy ideas from Vermonters. We have solar energy at our house, and could not be happier. We have not had an electric bill in 10 years, and use electric heaters, and our wood stove in the winter to keep our oil usage to a minimum.

1. All new buildings should be required to be solar. Particularly industrial or public buildings. I think it is an outrage that the new State Police building in Williston has no solar panels. And the parking lots at 'park and rides' could have awnings of solar panels (what a great thing to have covered parking!).

2. We live in Williston (luckily on the Vermont side, not the New Jersey side), and I find it such a wasteland of flat roofed buildings that could all be used to hold solar panels that would generate more than enough electricity for their own buildings and more.

3. There was such attention to the new development in South Burlington that will be designed as energy efficient/solar. However that is only one of probably 5 new developments going up in South Burlington. And many of the apartment buildings going up are flat-roofed- and could support solar panels on the roofs. Lost opportunity and wasted space.