House Committee on Environment and Energy Alison Despathy -Testimony April 6, 2023

Thank you so much Chair Sheldon for the opportunity to provide testimony regarding S.5

I want to thank all of you here so much for caring enough to really dive into this bill and ask the the tough questions to ensure this is sound policy for the people of Vermont and our state. I have watched the majority of testimony on this bill and there is clearly more robust, honest and effective conversation happening here than in the Senate. Thank you for allowing that to happen.

I am aware and appreciate the situation you are all in here regarding the goal of achieving both social and environmental justice. Not an easy task- thank you for trying to get this right. I honestly do not know if this is possible with the current structure of the bill and the use of the clean heat standard. There is a clear disconnect regarding the increased cost of fossil fuels- whatever that may be-and the goal of helping provide equitable access and affordability for all Vermonters and a move towards a more sustainable energy framework. I will not repeat the issues related to cost burdens, design flaws and workforce that you have already heard.

I have been researching and writing about this bill since the H.715- clean heat standard which initially drew me in because of biofuel concerns and the convoluted and complicated carbon credit system that did not seem to offer a real solution. I have done extensive research over the past decades regarding the carbon market and the tendency and ability of companies to abuse this market- the level of green washing has always been part of this. I have witnessed this with many banks and the Nature Conservancy for example. They have been gathering carbon credits/offsets for decades to get in on the game, ensure their positions as the middle man and gain profits. With this knowledge of the tendency for fraud around carbon markets, I kept trying to figure out why a clean heat standard which is the equivalent of carbon credit as originally defined by the Kyoto Protocol would be the best method to achieve Vermont's environmental and social justice goals.

We are a small, environmentally conscious state with 75% forest – offering a highly effective natural carbon sink to offset current fossil fuel use and we are already fully on the path of energy transition.

Vermont is being pulled -actually pushed- into the emerging carbon market and the real questions are – Does this serve Vermont? Does this result in environmental justice? Or is

it simply fueling another market with infinite flows and exchange of carbon which is exactly what a market demands and how a market flourishes. However and unfortunately, this time it is done at the expense of Vermonters who are paying for this system to run. Most Vermonters are already financially struggling.

I have heard Richard Cowart testify multiple times and I have also spoken to him personally regarding his opinion on the need for this performance standard in order to track progress and reductions but I greatly question this path and its ability to serve both the people of Vermont and the climate goals- they seem antithetical thus making the current design dangerous. There are other methods for accountability, measuring progress and funding that do not bring the level of burden that S.5's current design will. Options include- allowances, ledgers and a separate funding pool distinct from and not dependent on charging a sector that will only be forced to pass on costs to the Vermonters who you are trying to serve and help along in the energy transition.

It is also critical to note that the establishement of a carbon credit trading system in the thermal sector is truly the intent of this bill- Next will be the transportation sector, farming and agriculture, and then personal carbon footprints- all sectors related to carbonwhich is the base of life- will be wrapped into this new commodity market. Is this the right path? Is this a real solutions? Will this bring environmental and social justice? Who will it serve?

Cowart has a \$200,000 contract with Massachusetts for this 'Clean Heat Standard" He has pitched the idea to many other states and Europe as well. What is currently sold as a plan for Vermont will soon expand out as a regional, national and global exchange of carbon built on the backs of Vermonters paying more for heat and potentially other necessities

This is how a market is built – it will serve Wall Street who thrives on these flows and exchange and it will serve large corporations. Meanwhile Vermonters and our small fuel dealers and energy producers will be forced buy or accrue enough carbon credits in order to do business? Can you imagine down the road if we needed to buy carbon offsets from British Petroleum- VGS just did this. This is the road we are on with S.5- it's not VT specific and it is not real environmental justice. These are the inherent design flaws of this bill- they will not be fixed unless we move away from the clean heat standard and determine a separate funding pool- ideas offered later-

A recent public records request was made to the PUC and DPS regarding documents related to the the Clean Heat Standard Design Group also known as the Clean Heat Working Group. The PUC provided the requested documents. It is clearly evident for

anyone watching the climate council and subcommittee meetings, that the Clean Heat Standard Design Group had conversations about the development and use of a clean heat standard- carbon credit equivalent- prior to the initial climate council meetings. This is concerning for many who have been watching closely and wondering why and how we ended up with the Clean heat standard (CHS) as the answer with no formal, transparent analysis, conversation or debate regarding this option within the climate council itself. I have enclosed these public records in my testimony which I will submit- I encourage and hope that you can go through them-they are insightful and offer guidance for best action and potential amendments.

Based on the documents and timeline provided, conversation around determining an option and discussions about an allowance or a standard happened in this separate group. The standard was decided and then presented to the Climate Council as the path, it was then officially adopted and there is no record regarding robust analysis and conversation within the Council on the CHS. It does not appear that the private meetings were shared with the climate council either. There was a white paper submitted to the legislature from these meetings, however it does not appear that this was discussed with the climate council either. Yesterday, Charity Clark discussed her support of the implementation of the Clean Heat Standard as part of the Climate Action Plan. She described it as a well considered policy by the climate council however, acknowledging that the Clean heat standard did not develop within the climate council and originated outside of the council is relevant and deserves scrutiny in my opinion.

Tom Knauer of the PUC, Don Rendelle, Neil lunderville, and Tom Murray of VGS, Richard Cowart, Jared Duval and others were involved in these meetings of the Clean Heat Working Group...This legislation presents the PUC as an independent body tasked with creating rules and establishing this program but it is clear that Tom Knauer of the PUC was on this clean heat working group. I fully understand the need for those knowledgeable in these areas to gather and brainstorm but the different options were not then presented to the climate council . None of this deliberation and decision making seems to have been shared with the climate council in the meetings. This is relevant – would the climate council have supported the clean heat standard choice if given the options- at this point we do not know.

Due to this situation and the questions and concerns that it surfaces, what many want to see is that this history of the development of the CHS become part of the discussion at the legislature this session. What many Vermonters want more than any particular outcome is an honest and transparent process, which based on these public records

appears to be compromised.

There are several meaningful quotes to be considered from these meeting minutes;

12/15/20—Don Rendall of Vermont Gas Systems: "VGS has not yet seen reduction in fuel sales in service territory due to heat pump installations...Specifically, fuel use was not significantly reduced in VGS territory among those customers that received Efficiency Vermont rebates for heat pumps."

3/9/21—Tom Murray of Vermont Gas Systems - "People who got heat pumps a few years ago have had no decrease in gas use - using mostly for air conditioning. They put a single head system in a house that would need multiple heads. We would like to help get heat pumps out there."

These warrant that the legislature or the Public Utilities Commission request to see the data from Vermont Gas Systems regarding the clean heat pumps and their ability to reduce fossil fuel use- in other words are these worthy as eligible measures in reducing carbon emissions, how are they working- this should be assessed prior. Please consider this action. Properly trained installers and ensuring that appropriate systems are installed correctly all influence performance and actual reductions in fossil fuel

Dennis Percy of Fred's Energy and other fuel dealers. specifically requested in both the Senate and the House that a a high efficiency heating system that reduces fossil fuel consumption by 50% should be counted as an eligible measure. This is a direct, clear and easily measurable reduction in carbon emissions. This should count as an eligible measure. I know so may argue that this is locking in a fossil fuel system for 20 years. However, it is important to note that the existing language regarding renewable gas enables VGS to continue to flow fossil gas into Vermont until 2050. I understand that VGS has tremendous amount of money invested in the pipeline and if they will be continuing to move this fossil gas through the pipe until 2050 then it only makes sense and is equitable that fuel dealers should be able to have the installation of high efficiency heating systems -offering immediate and local carbon reductions -count as an eligible measure. This can always be revisited and removed as an eligible measure as the technology evolves and the necessity of fossil fuel use decreases.

The fuel dealers are limited to using bio fuels but not getting any credit for the known, easily measurable reductions with replacing old systems with new systems. By allowing high efficient fossil fuel systems, the fuel dealers are offered the opportunity to

significantly help reduce carbon emissions even by 50% or more in some instances. This offers a real impact with carbon reductions.

With this in mind- Please consider striking from the bill under- Section 8123- Definitions-Number 3- clean heat measures- "Clean heat measures shall not include switching from one fossil fuel use to another fossil fuel use"

Further support of this consideration to allow high efficiency fossil fuel systems- is the fact that biomass and biofuels are considered acceptable both of which are more carbon intensive and create more emissions based on full life cycle analysis metrics than fossil fuel.

Without this amendment, this legislation greatly favors VGS and is highly inequitable to the fuel dealers who have the capacity to make immediate and significant reductions in carbon emissions.

14 Significant Reasons Why S.5 is Destructive.

1- Copper is essential to the electrification of Vermont and the planet. The largest copper mines are in South America where over 5.5 million tons of copper are mined annually. The Chilean state-owned CODELCO mine is the largest copper mine in the world. The people in this region of the country have the highest rates of cancer, severe respiratory disease, birth defects, premature death, infant mortality, and tumors. The air, land and water are contaminated with over 66 toxins from mining operations including arsenic and lead. Schools and neighborhoods are covered with fine black particulate dust and levels of arsenic in the air are well over 200% of the acceptable limits. The water is drying up due to copper mining and many areas are no longer suitable for growing food or even living. The people are taken advantage of in the mines and protective gear for most is basically nonexistent. Speaking out about the injustice results in loss of work- work that many are dependent on to feed their families. The women in this area have banded together to reclaim the health of their children, water and lands and basic human rights. Equity does not stop at the borders of Vermont- Be prepared to cry if you watch this video about copper mining in Chile.

https://youtu.be/jNUbroQ2XZ4

2- Diversity in heating systems to offer the most reliable, earth-friendly, high efficiency heating systems is a worthy goal -this is NOT the path of S.5. If a home is best served with a high efficiency system that uses half the fossil fuel of an existing system and will work in the coldest temperatures, according to S.5, this is not an acceptable eligible measure despite major reductions in carbon reductions. In most situations, heat pumps will not work at colder temps- these are still supplemental systems. There are many Vermonters who cannot and will not be able to financially justify a supplemental system even with steep incentives.

3- Micromanaging and compromising the thermal sector who have been moving Vermont toward less reliance on fossil fuels and more efficient systems for decades is abusive and cruel. At the heart of S.5 lies greed and the framework to extract money from this sector, promote a monopoly of energy and establish a carbon credit system. Don't be fooled by the false promise of environmental justice- this is not the point or the end goal of S.5.

4- Heat pumps are highly prone to mold and bacterial overgrowth. The research is clear and all HVAC sites and heat pump installers have information about this common issue. It is almost guaranteed this will happen in Vermont's climate. If the mold or bacteria develop in the heat pump, it then circulates through the ducts and house resulting in allergies and health problems. On average, a heat pump cleaning is \$250 and is recommended twice a year. Who will pay for the regular upkeep and mold mitigation in these heat pumps -especially for low income Vermonters? Due to the prevalence of this issue, some heat pump manufacturers are reformatting their design to try and prevent this pooling moisture and mold growth.

5- S.5 brings high risk for fraud and the installation of inefficient and inappropriate heating systems by transient installers who flock here to take advantage of the situation and a guaranteed funding stream. Many of these installers are not properly trained, may sell the wrong size system and will not be around to offer reliable service and maintain equipment for customers. There is also a high risk that some may sell full heat pump installs without a back up system -placing Vermonters at risk for no heat during the coldest temperatures.

6- As proclaimed by many legislators, lawyers, utility and gas companies, and large fossil fuel dealers/wholesalers who support this legislation - "this is what it takes to create a market"- Select entities will benefit from this legislation and it will be done on the backs of hard-working Vermonters. 7- Many Vermonters will opt to use out-of -state fuel dealers who will cross the borders and deliver fuel at a lower cost compromising our entire thermal sector, small fuel dealers and the economy. Penalties and enforcement on this still need to be determined. With a limited ability to monitor purchases, smuggling will be a reality. Also there is nothing stopping people from filling up tanks of fuel over the border in order to afford to heat their homes

8- Vermonters want to help the environment and pay less NOT more for heat. Hundreds of millions of dollars in federal funding are coming. Instead of appropriating money for reports on the detrimental Clean heat standard -which has the ultimate goal of increasing the cost of heating fuel and locking in bogus carbon markets- directing money towards training a workforce to ensure this money gets used should be the priority. We are already paying for that revenue stream in the form of inflation.

9- The majority of biofuels are not green, renewable energy. Biofuels require massive deforestation of many countries. For example, to reach the demands for biofuel in first world countries- Brazil's rainforest and ecosystems are destroyed at alarming rates to make way for genetically modified sugar beets used to make biofuel. These GMO crops require glyphosate and pesticides further poisoning the lands, water and people of these regions. This is not green, renewable or ethical.

True, the fossil fuel industry has also wrought destruction and it has taken decades to attempt to clean up practices. Here we are again allowing human rights abuses and environmental degradation to run rampant as Vermont plows ahead with grandiose ideas of electrification at the expense of others and the earth.

10- Weatherization is key to efficiency and reduces both fossil fuel use and heating costs-There are robust agencies and programs in place to ensure weatherization efforts are top priority. This is a win-win situation. With tremendous federal funding and existing fuel taxes that fund weatherization programs, this benefit will increase throughout Vermont. We don't need S.5 to continue to move this path forward.

11- Biomass is a highly destructive source of energy. In the Senate, there was an abundance of testimony presented on the dangers of biomass to marginalized and impoverished

communities and the earth. Fossil fuels have less carbon footprint than biomass for those who track carbon.

12– Many areas of Vermont require both grid upgrades and electrical upgrades in homes necessary for heat pump installs and electric vehicles. This takes significant money and time -meanwhile Vermonters will pay more for heating fuel with a severely limited workforce to build out the infrastructure.

13- The corporate carbon market is bogus and rife with greenwashing deals. Why would Vermont even consider entering this predatory game at the expense of Vermonters and small businesses? There is severe injustice and lack of common sense in the S.5 framework. S.5 literally sacrifices the people to claim bogus green policy and set the carbon market stage.

14-75% of Vermont is forest – For anyone in Vermont concerned about carbon, this forest is a highly effective and natural carbon sink that offsets all of the fossil fuel use in this state.. As China and India embrace fossil fuels and open hundreds of coal plants, Vermont is net zero yet attempting to pass destructive legislation that will result in higher costs of fuel for Vermonters and businesses and bring unnecessary struggle in the name of "environmental justice."

Final thought- A carbon market funding scheme that ultimately sits on the backs of Vermonters is not a real solution. Placing this charge on the fuel dealers results in an indirect but certain burden on the people of Vermont. A funding stream that is more reliable and concrete and would not bring more burden and risk to low and moderate income Vermonters who are working so hard and struggling to cover basic expenses is required and would solve the fundamental flaws related to S.5.

A better solution that is known, effective and already in place, would be a direct increase on the fossil fuel tax. This would instantly alleviate the unknowns and bring a guaranteed, steady stream of funding to support this energy transition and ensure that money is available. Please consider an option to the convoluted carbon credit – clean heat standard- design that brings much unnecessary strife, struggle and stress to so many. Thank you for your time and consideration.