Climate Action Commission Listening Tour St. Johnsbury Meeting, September 13, 2017

Commission members in attendance: Deputy Secretary Peter Walke, Peter Bourne, Michele Boomhower, Harrison Bushnell

Paul Brouha, Sutton – Town of Sutton planning commission, involved in town plan and immediately adjacent to Sheffeld Wind Project. I'm not an adherent to project because I have to live with it all the time. (Read comments entitled *Ideas for the Climate Action Commission*)

Carl Beyer, Ryegate – (Read comments entitled *Replacing Fossil Fuels and emphasizing Renewable Energy Resources in Vermont*)

K.C. Whitely, Montpelier – (Read comments entitled *Testimony Vermont Climate Commission Public Meeting St. Johnsbury*)

Barry Lawson, Peacham – (Read comments entitled *Statement to Vermont Climate Action Commission*)

Keith Ballack, Sheffield – (Read written comments starting with "Carbon reduction")

Aurthur Trezise, Fayeston – We see concern about climate change. We need to look at getting action on this carbon tax with the benefits going to lower income people afterwards, for a hybrid or an electric car. People who had the vision to buy those cars earlier are turning them in for newer models and the resale market is lower than conventional cars. Could use the money for that, or for insulating their homes. Vermonters want to buy pickup trucks, which are not cheap. Legislature can't vote for climate solutions because that's a vote against corporate interests because they have to get elected. We need to demand results. Vermonters will go for the carbon tax if it will help them contribute to the environment.

Christina Fornchari, Burlington – Lead organizer from VPIRG. (Read comments beginning with "Good evening Commissioners.")

Grace Gurshuni, Barnet – Lives in NE Kingdom for 40+ years, writes about compost. I've come to represent a new organization called the Vermont Healthy Soils Coalition. We talk about what we can do to mitigate and reverse climate change through soil carbon sequestration. We can use some of carbon tax to pay farmers to draw more carbon out of the soil through photosynthesis, will help clean up the lake, and other benefits to reduce toxic pollution. I'm an organic farming advocate. There's more recognition of the importance of soils - at the Paris Climate meetings there was talk of using agriculture to bring down climate emissions. Vermont has the largest number of organic farmers in the country. Tax nitrogen fertilizer and use it to subsidize community composters, who are having trouble competing in terms of cost with other sources of nitrogen. Greenhouse gas- when you spread soluble nitrogen on your fields it is 310 times more potent than CO2. The sooner we can stop manufacturing and dispersing manufactured fertilizer, the sooner we can address climate chaos.

Patrick Flood, Woodbury – In the end you're going to hear a lot about technical questions, I still don't get a sense of urgency from the people who are responsible for making the decisions. The representatives from the Climate Commission should all be here to hear this and not just get it second hand. Urgency is something we have to live by. The events of the past couple weeks will be commonplace 20 years, but we can keep it from getting worse than that. We baby boomers have lived the highest quality of life of any generation ever. Our kids are not going to have that. We have to think about that every day. That should be our common filter – what is going to be good for our children. We've already handed them a giant mess. The other thing we don't talk enough about is conservation and efficiency – costs less, less controversial than nuclear or wind turbines. We should be conserving every iota of carbon we can. If you take nothing else, let us reduce our use. We are not going to build enough turbines and solar panels to solve this problem. Our children are going to look back at us and say what did you do?

Eric Phillips, Burke – The one thing on your website that I didn't see that's worthy of consideration, Verified emission reduction carbon credits. Projects can verify with certification programs, businesses sell their credits on the international market. It would be fun to integrate all of those like an electric vehicle car share, on demand car services, free food delivery for local food replacing refrigerators, anything to bring down our overuse of appliances. There are problems with conventional diary. (Comments drawn from statement beginning with "First, I would like to thank the Governor for establishing this Commissions...")

Kim Freed – Thank the group for coming, glad there's four of you here. I heard a couple of things that are incorrect that I'd like to straighten out. Comment that PUC has taken wind off the table – I'd like to see the proof of that. Our town and three other town are still suffering from the Seneca mountain wind failed project, we're still suffering from investors suing the town. The change that we see now from the PUC is that the developers from industrial sized projects are being held to the letter of the law. I can recite ACT 248 and 246 to anyone, in the past developers were given a pass, but wind developers are now forced to follow these regulations. We're putting in huge renewable developments in our small state. If we want to have an impact on global warming, we need to work as a united group, not just in sections of Vermont. We're going to spend hundreds of million on transportation. Instead of spending millions of dollars in the courts, let's put that money into transportation, hybrid cars, putting money into housing efficiency.

Hannah Huber, Montpelier – My generation in this country is projected to lose \$8 trillion from climate change. We're expected to hit an increase global temps of 2 degrees C by 2036. Will my retirement fund by my survival fund? We need bold solutions fast. Carbon pricing that would benefit low and middle class. (Read comments, beginning with "Hi, my name is Hannah Huber.")

Dan Clements – I am here representing a group called the Vermont Climate Health Alliance. We are a group of doctors, nurses, public health professionals from all sectors, forming now, and are sending letter to commission. We have a 200 person mailing list from all over the state. Impact of climate change on human health is vastly underrecognized by most medical folks. Rapid spread of Lyme disease, anaplasmosis, weather events all over the country, this is where we're going, human health impacts are mind boggling. We're going to talk about the benefits of the

REGI program, 300-600 lives have been saved, just from fossil fuel plants reduction. Report from 130 scientists across U.S. Government, all agencies, talking about the health risks. Another report, the National Security Implications of Climate Change from the Pentagon. I've had young people come up to me about whether or not they should have kids. Can you imagine if we had to think about that when we were young? That's what our group will be talking a lot about. Transportation is a huge issue, in Burlington there are bikes. How come there aren't a lot of bikes in Rutland? I'm a firm believer in carbon pricing. We have to be careful that it's equitable. One of the challenges for the commission is to bring together a group of people to look at this. The commission should be talking about the intersections of climate and health. There's a lot of opportunity for information and outreach.

Dave Sneddicar – Director of the NVDA, regional commission. Introducing draft energy plan tonight. If you come up with strategies that you want to implement statewide, think about how that's going to play out in different parts of the state.

Mark Whitworth, Newark – Planning commission and board of NVDA. President of Board of Energize Vermont, promotes sensible sustainable energy for Vermont. (Read comments entitled *Energize Vermont* beginning with "In Vermont, too many discussions of climate action..."

Liston Tatum – With VPIRG. When I first saw the wind towers, I thought they were ugly, over time I have come to see them as beautiful. Anything we do to slow the progress of carbon progress threatens the lives of our children and grandchildren. I had to think hard about having children. I think my children and grandchildren are looking at a horrible future. Deniers will be looked upon badly by the future generations. You need to go look at the turbines close up.

Stephen Gorlock – Live in Walden where I've been off the grid for 20 years. Driven to make this statement by statement Walke Vermont's response to climate change will continue to grow the economy. I imagine that everyone in this room is behind. Sooner or later we have to acknowledge that economic growth is the problem. (Read comments beginning with "I have to take issue with the statement...")

Shena Casper, Montpelier – I've work in various communities who are affected by toxins. My father got Lyme disease, it was really scary. Ticks in Vermont are new, and the health impacts of climate change are felt by everyone. This impacts low-income, people of color, women, young people the most. Our grid serves everyone, need to embrace solutions of all sizes, solar, wind, carbon pollution tax.

Daniel Brown, Castletown – We all care about the climate. This is a problem that is real, we need to act on it. Rutland county still hasn't recovered from the 2008 economic downturn. Weatherization programs would put people to work. Put a price on carbon pollution for my future, for my children's future. Please act now.

Barry Cade, Montgomery – On the planning commission. All of the time I've been in Vermont, Franklin County has been dominated by dairy. Manure used to be pleasant smell, now "manure factories" eyes burning, make people sick from the smell. It's source of pollution in the lake. ANR doesn't address it, hands it to Agency of Ag. ANR should be conducting air quality

sampling to determine what is in the air. Dairy farming is not sustainable by getting larger and larger. We should require that the manure goes through digesters, capturing energy and keeps it from fields and water. My motto: "Industrial Scale Energy Development: not in my back yard. Community Scale Energy Development: please in my front yard."

Rick Barstow, Adamant – The urgency of this issue. We have been set back a quarter century on addressing these problems by our leaders. One of the main ways of addressing this is efficiency. Every unit of energy we do not use means we don't have to build infrastructure for that unit. Across the board for us as a consumer society, we can't keep going on consuming. Wind and solar needs to be appropriate sized. Huge-scale wind – we don't need that, it's irresponsible. Even if we stop putting CO2 today, we are going to keep warming as a planet. We need to look at ways to draw carbon out of the atmosphere with responsible agriculture. Industrial agriculture needs to be steered in a different direction. What we're confronted with here is something on the scale as the country tackled during WWII to take on Nazis taking over this world. Carbon in the atmosphere is similarly a global problem. Vermont needs to lead, small as we are, to get this whole planet to address this situation.

Stephan Forum, Plainfield – Lived in a family house that a member of my family has lived in since 2 years after Vermont joined the union. Labored on my family dairy farm in my youth. We did it differently then than we do it now. Everything came from fields that we could drive to with a farm tractor. It didn't smell bad. The only time petroleum was used was milk deliveries. Now that land being rented to a dairy farmer who produces milk by having other farms like mine, he burns fuel to transport it to his farm, has to burn fuel to haul his manure to come back to my farm. The manure we spread was dry matter, now he spreads liquid manure, burning petroleum to basically haul water around. Because of our economic situation that's the only model that is viable now. I don't criticize him the farmer, I criticize the system that makes that the only economically viable way to run a farm. We need to examine the way this is done and figure out a way to make it economically viable to have small farms again. Vermont's dairy farmers are aging and many don't have a younger generation that wants to take over the farm. Current model of farming is destroying the environment, polluting the lake. Old way of spreading manure didn't pollute the lake. Needs to be Vermont-sized. Big farms are not sensible for Vermont. We need to cultivate the "Stay at Home Economy." We want to create tax incentives to create jobs, it's not going to cost as much to do business. Vermont's difficult to live in, cold, snowy, salted roads. I don't feel badly about demise of IBM. Need more small local businesses.

Alven Clements, Burlington – Climate change will not solve itself. Each year, we see more effects in our day to day. Storms have caused massive destruction, Irene caused tax payers a billion dollars. This is not normal. Need strong leaders, need a carbon tax.

Corrine Wagner, Northfield – There's little awareness of climate change in Northfield. A bold approach to have 100% renewable is absolutely essential. It's almost too late now, we need to recognize the urgency. Needs to be a price on carbon pollution that reflects the full cost including the health effects. Solutions must be democratic and support small businesses.

Jack O'Callaghan, Burlington- I am sick and tired of being dependent on out of state, multi national, fossil fuel companies. The year is 2017 and there has been over 100 years of scientific evidence pointing to the burning of fossil fuels as the main contributor to increasingly unpredictable weather patterns and drastic climate change. This is the great challenge of our time. Climate change deniers occupy both the White House and Congress while storms like Hurricane Irma and Harvey are only growing more intense, leaving large swaths of destruction and devastation around the country, bringing back memories of Tropical Storm Irene right here in VT, which cost taxpayers over \$1 Billion dollars. The sheer cost of such destruction to the economy is astronomical with the worst of the burden falling on the most vulnerable. We cannot afford to wait any longer to start accounting for the cost relying on these fuels has on our community, especially when alternative technologies have existed for a long time. With a stagnant VT economy strained with producing well over 2 Billion Dollars of wealth every year, just to send out of state to multi national fossil fuel companies every year. Which could be used to fund a lot of great ideas the have come up here tonight. I support making electric vehicles more affordable and accessible for folks of all income levels. These companies instead in turn use their profits to spread disinformation and hijack our democratic process. We could help the economy grow right here in VT by putting a price on carbon pollution and using the revenue to make cost of living and doing business here, in-state, considerably more affordable.

Beth Champlain – St. Johnsbury, lived here for 25 years. Grandmother, I could sob to know that my grandchildren who have wonderful parents and a great school are not learning anything about the living earth, carbon cycles, energy cycles, nutrient cycles. They're not learning that the scientists are clear that with just a fraction of the arable land on the planet you could remove enough carbon from the atmosphere. Read Christine Jones "The Soil Will Save Us," or Judith Schwartz books "Cows Save the Planet" and "Water in Plain Sight." Civilization means living on top of nature, what was the mission of western civilization – the conquest of nature. I would like to see every student in Vermont in the 7th or 8th grade spend the entire year learning about the living systems of our planet and then spend the summer planting those cover crops that will nourish the soil. That soak up water so that when the deluge falls, the soil can absorb it. The carbon stored in the soil can keep everything flourishing during the drought. Sterling College used to take people on the Lowell towers ridgeline to see the incredible ecosystems that are the headwaters at the waters. Now there's flooding happening at the base of that ridge. It's complete self-destructive insanity to say grow the economy. This our opportunity to come down to earth and If you were taught as I was that it takes 1,000 years to build an inch of topsoil, read about the farmers that are building topsoil at phenomenal rates by the way they are farming. Let's treasure being alive on earth and let's work hard to protect life for your children and grandchildren and mine.

Tom Hughes, Burlington – Energy Independent Vermont. I'm thrilled for the governor's goals to grow economy, protect most vulnerable, and make Vermont more affordable – these are goals we share. Commission should consider one additional point, solutions be commensurate to the challenge, which is grand. Our carbon emissions are up from 1990. Carbon pricing offers opportunity to fund some of those solutions. We're happy to work with you on that. (Comments drawn from VT Digger editorial)

Nick Wallers, Burlington – Support carbon pricing, protecting the most vulnerable. I'm an advocate for peace, fossil fuel industry is not peace. Friends and families shipped off to war, indigenous families displaced from drilling, people displaced from natural disasters, industries that value profit over health of our people and planet. I'm looking forward to seeing serious results.

Ingrid – All of these different problems, when I grew up we children were kept busy in the gardens and schools, now every day one of the red trucks makes its way up the road and sprays from Cabot creamery. I have seen the chemical sheets of what is in that water, that stuff gets sprayed and no one does anything about it. \$2 million to build water purification plant which they never did. That stuff is so toxic. When the spray hits the houses because the wind is strong, the paint goes bad, people are unaware of this because Cabot is a serious business, a decent business, but most of the families in Cabot have cancer. Once you get into it you can't get out of it because no one can stop it. The cheeses are made out of state and wrapped in Vermont as if they are made here, but they are not. There are 5 yearly permits that Cabot creamery can contain. The stuff is deadly and we shouldn't really tolerate that. Why do we do that? I can't figure it out. The 12 red trucks, 2,000 trucks go 24 hours a day all the way to Memphremegog and back, they pour it in a brook. I'm not making this up, you need to examine this, clean the water before it leaves the factory.

Larissa Segred, Planfield – I came here by public transit. From an 1991 article from the NY Times "Polluters unwilling to take responsibility, arguments over who should pay." They were talking about one of the worst toxic dumps in New York and I lived 3500 feet away from that superfund site. My mother died of cancer, my brother was about die of cancer when this article came out. I took it personally. The fundamental thing that needs to happen is both an assessment of costs and taxation is the closest thing we'll ever get to responsibility, we don't get it through the courts. Price polluters pay up front, the main thing that motivates is quick money, get what you can now and to hell with the consequences. At the time you proposed your project that will trash the environment, industrial dairy farming contributes to that type of thing. We need taxation that makes it financially unsustainable to transport tar sands gas across our state. This is an "accelerating existential threat." You need to act as though this was about to land in your back yard, as it did in ours so many years ago. We can no longer rely on the federal government. Do it with state taxes.

Cecil Johnston, Cabot – I'm a seamstress - I try to keep your clothes out of landfill. Broadband access, the state wants it. That requires energy, so does electric cars, if you're going to have it we're going to have to develop energy sources. Southern Appalachians – look at what has happened in those states to the mountain tops. We don't want to go down that road. I love the idea of community development projects. Developing nations with high populations that are quickly coming online, see standard of living of U.S. and want it, their problems become our problems very quickly. How do we provide the energy we need so our economy is stable? That will be best preserved if we can afford those things. If we focus on ethical, sane, environmentally sane energy development, we will become a model for other places in the world.

Chloe Greenier, St. Albans – Work for VPIRG. Talk to Vermonters about a carbon pricing, filled with hope about the number of Vermonters who support this solution. Many of them are low income, Franklin County has many of them, our low-income neighbors are some of the most vulnerable victims of a fossil fuel economy. Carbon pricing is the most efficient and sensible way of doing that.

Rick Howsman, Newberry – I want to go on the record for carbon pricing. Governor signed a bill called rural economic development infrastructure bill, allows local communities to get together to do things like develop broadband. If, in an area like the NE Kingdom got together and put in broadband, we could run our economy with a whole lot less commuting.

Sam, Burlington – I've lived in one home my whole life, built before the civil war, requires upkeep. My dad has been working on it for 22 years full time. Every time I went home, he'd be working on a project. We didn't have the money to have someone come weatherize our home. That's why I believe in putting a price on carbon pollution. Makes perfect sense if we can have that price and then fund money into a low-income heating assistance program. It's hard wondering if I'm going to have a family or children, people in this state have to be able to weatherize their home on their own. We need to have some sort of system. Climate change is real, I believe in science. It's not a linear growth system, it's exponential, carbon pricing is the best way to address it.

Jason Kaiser, Lyndonville – Three resources that I encourage people to read. "Cooler smarter" IUCN. "Project Drawdown" and website. Over 100 things people can do to reduce GHG emissions, ranks them by cost and reduction. Electric vehicles and other unconventional things, eating plant-based diet and reducing food waste. When we think carbon, we think CO2, but methane is 87 times more potent as a gas.

Kevin Wheeler, St. Johnsbury – I was raised on the west coast in the 60s. We were inundated with problems like overpopulation, nuclear proliferation, these problems haven't gone by the wayside. I try to keep a small carbon footprint. I chose not to have children, don't see this world as a friendly place. There's a conversation that we all need to have, how we're going to survive this. The train has left the station. We need to start talking now about how we're going to live with this – federal and state government's not going to help us. In the last four or five years the number of 50 degree days in the morning for me to ride my motorcycle at 4 am has doubled or tripled.

Adam, Burlington – I take a bus to work in Montpelier. I'm glad the governor's taking this with the seriousness it deserves. I was born and raised in Florida. My favorite cousin lives in Houston and helps people with his law degree. I went to graduate school in Seattle, it's like a second home for me. Those three places are all affected by climate change right now. My parents' home was almost blown down in Tampa. Houston is still under water, as are the surrounding communities next to the refineries. Storms like Harvey and Irma are not done yet. In Seattle, the last 4-5 years wildfires are out of control. 97% of studies say these kids of events are going to happen more and more. We need to make sure we have grid capacity to get carbonfree energy to people. Carbon sequestering in agriculture. Put a price on carbon pollution, this is supported by all people.

Ideas for the Climate Action Commission

A recent commentary entitled "Vermont's Greenhouse Gas Mandate: Costly, Symbolic Environmentalism" on reducing Vermont's greenhouse gas emissions by Jonathan Lesser has been broadly disseminated by various Vermont media outlets (https://vtdigger.org/2017/09/05/jonathan-lesser-numbers-dont-add/#.Wa zQ23QdE4).

Dr. Lesser, PhD, is president of Continental Economics and he makes the case that the numbers in the 2016 Vermont Comprehensive Energy Plan (CEP) don't add up. Couple Lesser's analyses with the fact that Governor Scott's newly appointed Climate Action Commission is conducting a "Listening Tour" (http://vermont.gov/portal/government/article.php?news=6470) around the state during the next month and Vermonters have a rare opportunity to meaningfully influence future energy goals and actions in Vermont.

We need to propose actions that will stimulate and improve our economic competitiveness while preserving the social fabric and environmental resiliency of our state. Vermont's Green Mountains provide a uniquely beautiful place to live and grow our families—we need to ensure it stays that way! The Commissioners are looking for good ideas for reducing Vermont's total per capita energy use by more than one third and for obtaining 90% of our total energy from renewable sources by 2050. These may be good goals but Vermont "environmental organizations" are pressing to have them (and the CEP) codified in law to mandate expensive actions designed to leave us feeling great about saving our planet despite the facts (evidenced by Dr. Lesser) that demonstrate such actions taken by Vermont will yield no perceptible benefit and will damage our economy.

Residents of the Northeast Kingdom (NEK) need to turn out in force to propose sound strategies for reducing our energy use (already among the lowest per capita in the nation –[our per capita GHG emissions are the lowest in the nation, I'm not so sure about energy use]) and for switching to renewables where we can do so cost effectively.

It makes sense to increase the thermal efficiency of our older housing stock (many of our homes were built prior to 1940), to improve transportation efficiency and vehicle mileage, and, yes, to equitably share the cost with other users to build a reliable and cost-effective, distributed electricity grid in the Kingdom and throughout New England.

We in the NEK are already net exporters of renewable electric energy even without considering the huge output of local Connecticut River hydro-dams. This is great news—we are way ahead of the rest of Vermont and (thanks, in part, to Efficiency Vermont) our electricity usage is decreasing! The draft Northeastern Vermont Development Association (NVDA) energy plan details the NEK energy situation and proposes goals and strategies to address the CEP goals (proposed as Chapter Two of the Regional Plan). Further, it proposes ways NEK towns can improve their municipal plans to include actionable energy sections that will benefit each one of us. It is at http://www.nvda.net/files/FULLDRAFT.6.30.17.pdf and is well worth reading. Let's plan and create our own energy future!

Still, The Climate Action Commission wants specific, actionable ideas presented at their listening sessions. I will attend their September 13th NEK listening session and propose two:

- (1) Utilities serving the NEK need to work with our newly renamed Public Utility Commission (PUC) to access more renewable base-load Canadian wind and hydro-power energy using the Sheffield/Highgate Export Interface or the planned high voltage lines transiting the NEK, like the Granite State Power Link;
- (2) Our neighbors in Chittenden County need to lobby for the Lake Champlain Wind Park http://www.champlainwindpark.com. It provides great benefits for them--it is near their electricity usage load center (Burlington), the transmission grid is not constrained in that area, it visibly meets the environmental

center (Burlington), the transmission grid is not constrained in that area, it visibly meets the environmental aspirations of Chittendon County residents, it has a great wind resource blowing across the lake, and it avoids private property concerns because it is in state waters. I feel sure we can muster NEK support for their project!

Paul Brouha, Sutton 802-467-3460

① www.champlainwindpark.com

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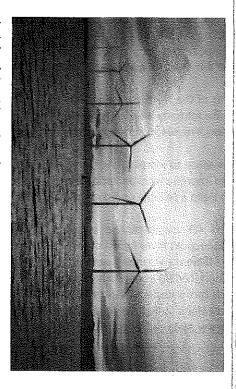
Future From Lake Powering our Energy Champlain. Local Energy. Local Jobs

electricity for Vermont's largest city. Wind Park will generate local renewable Located close to Burlington, Champlain Wind power is good. The fuel is free.

people of Chittenden County are taking Champlain Wind Park shows that the All power production has impacts.

Rather than purchasing power from remote mountains far from users, Champlain Wind Park places the responsibility for the impacts of their electricity consumption.

generation close to consumers.



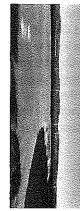
Simulation of Champlain Wind Park from Burlington Waterfront. 490 foot turbines scaled to 35 foot liighthouse.

CWP Blog

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GOOGLE EARTH OVERLAY



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Project Fast Facts

area towns million during construction and 180 MW Payments of more than \$1 million to Expected economic impact of \$450 Final project expected between 90 MW 20 to 42 turbines, each 4.5MW

Powering 80,000 homes in Chittenden

10 Full-time operational jobs 200 Construction jobs

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September 2017.pdf >

















To: Climate Action Commission

Date: September 13, 2017

Re: Replacing Fossil Fuels and emphasizing Renewal Energy Resources in Vermont

Several decades ago it was not uncommon to use coal for heat in Vermont. It was pretty dirty and coal plants in the midwest caused environmental damage in Vermont. We no longer use coal in the area as far as I know. We changed our energy resources here and elswhere and coal production has declined. Several years ago, my electric utility (Washington Electric), used Seabrook nuclear power, the most dangerous energy. WEC changed its energy resources and no longer use nuclear power.

Now, we are expanding our energy sources to wind, solar, geothermal, wood and captured methane from landfills and manure. We don't need as much dirty oil and dirty natural gas as we did before. These industries will be with us for quite a while, but like coal they need to decline and decommisssioning nuclear should lead to its decline. They also need to be less polluting as they decline. Statoil the large Norway oil company is cutting it's carbon footprint as part of Norway's carbon tax program. In addition they are also funding a system to capture and store carbon dioxide deep in the sea bed. Perhaps that should be the default requirement for oil.

Allowing oil and fracked natural gas production and infrastructure to expand makes no sense for a progressive energy policy. Vermont should not allow any expansion of infrastructure for fossil fuel pipelines in Vermont, in partnership with the other New England states and New York. That means the pipeline in Vergennes should be shut down and the Northern Passage pipeline should not be permitted in the Northeast Kingdom and no Tar Sands oil should be allowed to pass through Vermont. Allowing the fossil fuel industry to expand their efficiencies, infrastructure and sales will continue to contribute to their profits and expand our carbon footprint.

Especially in Chittenden County there are many cooperative housing developments. What is the Commission doing to expand community solar arrays and heat pumps in these compounds?

Thank you, Carl Bayer, Ryegate

TESTIMONY

VERMONT CLIMATE COMMISSION PUBLIC MEETING ST. JOHNSBURY

September 12, 2017

Our headlines last week were all about Hurricane Harvey and the Houston deluge that affected over six million people, then Hurricane Irma which flattened entire Caribbean islands on its way to Florida, leaving island communities in chaos, without shelter, food or water.

Meanwhile, monsoon floods devastated coastal areas in India, Nepal and Bangladesh, upheaving the lives of 40 million people, forcing millions from their homes and leaving over 1200 people dead.

In Mexico, a massive earthquake left over 2.5 million in need of assistance, with at least 100 people dead.

Out west raging forest fires are consuming vast areas in Montana, Oregon, Washington, California, Arizona, NM, Colorado and Idaho.

San Francisco beat its all time hottest temperature this summer by a whopping 3 degrees. Heat in the upper Midwest wheat belt caused what has been called a "flash drought - high temperatures causing evaporation that leaves grain dying on the stalk.

Each of the past three years has broken the previous global record for hottest ever recorded.

Insurance companies estimate insured damage of Harvey and Irma at between 50 and 70 billion dollars.

This all happened in one week.

I understand why people despair, want to bury their heads in the sand, just take care of their own, and hope they aren't next. There

are also people who are the first to help their neighbors and generously share what they have. It's heartening to see so many people stepping up to help those in need.

But what is sustainable and what are we as a caring community of Vermonters and you, as appointed commissioners, going to do? One thing we must do is prepare for the impacts of climate change – climate chaos as some call it - and mitigate the effects when, for example, a monster storm reaches us here.

It could also be a disaster like a pipeline spill or a train derailment of cars carrying tar sands oil along the shores of Lake Champlain. We don't expect these events but we should.

There were 2056 pipeline accidents reported by pipeline operators to the US Department of Transportation's Pipeline and Hazardous Materials Safety Administration from 2014 to 2016. That's an average of 685 a year, and I'm guessing there are many more since these are only the ones reported. So, it's less a matter of if a pipeline will spill, as it is when.

Vermont has laudable renewable energy goals, 90% by 2050, but no concrete plan to get there. We need a plan that holds us all accountable, or we won't get there.

The Public Utility Commission bowed to pressure from a few voices and issued noise standards that effectively took a major renewable option off the table - wind. There is much that can be improved in the wind development arena and the benefits for rural communities should be primary, but it's hard to imagine achieving our renewable goals without wind as a viable option in the mix.

Coastal areas of this country are literally sinking, going under, and many U.S. citizens will be displaced within the next couple of generations. If you could, wouldn't you want to move to Vermont? What will we offer - for jobs, for renewable energy solutions and a state that is not dependent on fossil fuels; for affordable, energy efficient housing and for public transportation?

We all know our winters are not what they used to be, and while our climate is getting wetter that doesn't mean more snow in the winter to keep those ski slopes busy. It means more erratic temperature swings; snow one day, rain the next, and ice on the next day. We all know this.

What is going to keep and make Vermont the great state we all love? It is not going to be business as usual. It is not continuing the Vermont Gas Pipeline and locking ourselves into a commitment to a fossil fuel future.

How will we lead the way to a fossil free future that meets our promises and offers optimism and hope for the next generation and stewardship for this beautiful land and planet we live on?

We need to reorient ourselves to this rapidly changing world we live in. We are literally in a race against time. I ask you to open your hearts and minds to the creative, practical and effective ideas that abound and the sense of community we enjoy here. Make a commitment to steer our state to a fossil free future for the next generations of Vermonters.

Thank you for listening.

Sincerely,

K.C.Whiteley Montpelier, VT Central Vermont Climate Action 350VT

Statement to Vermont Climate Action Commission

September 13, 2017 By Barry R. Lawson, Peacham, VT

My name is Barry Lawson and I live on Old Cemetery Road, Peacham. I am semi-retired and self-employed as a group facilitator and mediator, principally in the environmental field. I am a member of a political activist group, Northeast Vermont On Guard.

After considerable study of the issue of climate change and ways to mitigate the effects of human activity on climate, I want to encourage the State of Vermont to give serious consideration to proposals for carbon pricing (or carbon dividend) as a fair and effective way to reduce our use of fossil fuels and encourage renewable energy sources as quickly as possible. Time is running out, and I believe we can no longer tolerate foot-dragging by entrenched fossil fuel interests and climate change deniers.

I have been intrigued by proposals to adopt a carbon tax on producers, with dividends paid to consumers whom the tax ultimately burdens. I realize that a few such proposals have been introduced by members of the Vermont Legislature, but I am most familiar with the bipartisan proposal developed by the Climate Leadership Council, a national and international group attempting to secure support for a so-called "carbon dividend" approach. I believe that the imposition of regulations, while sound in principle, is less acceptable to many people than a direct tax on the production of CO₂. Further analysis is warranted on the following:

- How such an approach can be implemented cost effectively in an individual state. It stands to reason that a regional (if not national) approach is more likely to be effective. Vermont is on record for working with other states in the Northeast, and this work should continue.
- Returning the tax that is collected from CO₂ producers to consumers as a form of a dividend is sounder than a system that would spend the tax revenue in some other sector (e.g., education, social services, etc.). Not that these sectors could not use the money, but I think the basic premise of returning the dividend to those who ultimately shoulder the burden of higher costs is a major strength of this proposal. (Fossil fuel producers will pass along much if not all of the tax to end users.)
- The Climate Leadership Council is promoting the carbon tax-and-dividend approach internationally. I refer the Climate Action Commission to the Council's website and Facebook page for further information.

Thank you for this opportunity. I urge serious consideration of this creative and bi-partisan proposal to effectively reduce our deep dependence on fossil fuels and encourage economic development in renewables without burdensome regulations.

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Good evening Commissioners, and thank you for the opportunity to have Vermonters add their voice to such an important conversation. My name is Christina Fornaciari. I am 24 years old, a resident of Burlington and the lead organizer with VPIRG, the Vermont Public Interest Research Group.

I wake up each and every day with a pit in my stomach about climate change. I question whether or not I want to have children because I am scared of them growing up in the realities of climate change. I grieve over the lives lost and the suffering caused by climate change, foregrounded in our thoughts because of the devastation caused by Harvey, Irma, wildfires in the West, and countless more examples around the globe. Even as someone who engages in addressing climate change professionally as a full time job, I still am overwhelmed by the magnitude of climate change. It is the number one issue of our time.

Like any big problem, when you start with what <u>you</u> can do, what <u>you</u> have an impact on, the problem becomes a lot easier to chew on. In Vermont, we have a lot we can do, and I urge you, Commissioners, to make recommendations to the Governor that are commensurate with the challenge we face. We need to be bold, creative and courageous. We need leadership. We need to tackle the root of the problem—carbon emissions.

If you want to address climate change and boost Vermont's economy in a way that is good for all Vermonters, carbon pricing is the number one step you should recommend to Governor Scott. Let's price carbon and use the revenue to fund Vermont's solutions to the climate crisis—clean energy, electrification of the grid, energy efficiency. Let's price carbon pollution and help Vermonters transition to lower-cost, lower-carbon alternatives like heat pumps and electric vehicles that are becoming cheaper each day. Let's price carbon and nurture the part of our economy that is growing the fastest—nearly 1 in 17 Vermonters are employed in the clean energy industry.

Vermont may be small, but let's be clear and let's be honest: we *have* contributed to the problem of global climate change, and we must do our part in addressing this problem, and let's do it in a way that lifts up Vermonters and our economy. Thank you.

To:

Vermont Climate Commission

From:

Erik Phillips-Nania, Burke Resident

Date:

September 13, 2017

First, I would like to thank the Governor for establishing this Commission, I'd like to thank all of the Commission's members and the TAG Members, and I'd like to express my appreciation for the VACC VCAC holding these public hearings, and for the opportunity to share my perspective. And I'd also like to recognize the amazing work that's already been done - with special recognition of the materials submitted to the Commission, especially Jim Stile's "Ideas", James Maroney's "Converting to Organic", John McCormick's "Green Bank", and all the other very high quality resources on the VACC website.

The VCAC Executive Order is essentially a mitigation directive to significantly reduce GHGs through energy efficiency (EE) and renewable energy in a way that spurs economic activity, grows businesses, and makes Vermont more affordable. The priorities are essentially (1) transportation (approx. 42% GHGs), (2) residential and commercial fuels (23%), agriculture (11%), and electricity (9%). The VACC resources describe the priorities and the opportunities for achieving Vermont's ambitious GHG goals, and are the foundation for the Action Plan strategy that the VACE will submit to the Governor on July 31, 2018.

Based on a synthesis of VCAC's information, the following is a possible Action Plan that could be implemented, for example, at the District level/scale (with approx 4,100 residents per district in 150 districts, each with a Vermont House Representative who could facilitate this Action Plan for their constituents). This proposed Action Plan is simply: initiate, facilitate, and conduct a membership drive, interest survey, and/or education/information outreach to engage communities, to join/create businessescooperatives – in each District – for (1) an electric-vehicle (EV) car-share coop., (2) fuel/electric coop, and (3) food and agriculture coop, possibly coordinated by (4) a business/cooperative incubator to provide job training, coordination and administration services. This can help facilitate the reconstruction of the local entrepreneurial enterprises as a response to the deconstruction of the administrative state; a decentralization and re-localization of energy, fuel, and food.

1. Establish EV Car-share Coops.

- EV's on the market include the Chevy Bolt (\$37k-45k, \$30 after Fed tax credit; \$430/m lease), BMW i3 (\$43-50k, \$240/m lease) and the Tesla Model 3 (\$35-75k, \$600/m lease). VSECU offers loan assistance for EV's. There are various government grants, rebates, loans, and subsidies. Plus there are costs for charging stations (\$1,200).
 - Costs can be offset by providing climate action services to the community to reduce GHGs such as providing EE services in coordination with the Fuel/Electric Coops to provide people with free, on-demand recycling or composting services, laundry pick-up services if people trade-in their washers and dryers, or free food deliveries from local coops if people trade in their refrigerators. The Coop can also consider revenues such as for UBER/taxi services, special events, the Coop, and could contribute to Go! Vermont (ConnectingCommunities.org) for rides to work, school, (green) shopping and outdoor recreation; and free services for emergency evacuations or for increasing voter participation on election days, and so on. The EV Car-share could also provide discounted services for Members from the Fuel/Electric Coop and Ag Coop.
- Smartphone apps could be used to synchronize people's needs and demands, to optimize the use of the vehicle to optimize GHGs reduced in a way that is easy, convenient and affordable.
- The Coop could also leverage these EV's to fundraise for EV-Bicycles (approx \$1,500 each), to expand services for Village Center to significantly increase bike usage (From 7% to the 16% goal). EV-Bicycles can also be converted to pedi-cabs and pedi-trucks for delivering goods and services in a local area.
- If 10-15 Members agreed to share in the lease and use of three EV's, each member could pay less than half a typical EV/car lease. The goal could be to significantly reduce (cut in half, or eliminate) each member's car expenses. Membership Requirements and/or Options can include: Members trade/sell/retire their old, inefficient car to, which can finance their membership.
 - Members provide driving services as paid drivers, offsetting Membership costs.

 - Agreement to reduce VMT from 11,400 baseline (2011), less 2,300 miles (20%) to 9,100

COMPOINE Franspuriation FUE/ STELLINE + AG Provides, miles per year, with penalties for exceeding that limit, with incentives to reduce even more, with Membership payments reflecting VMT, with incentives for people to drive 80% less.

2. Establish Fuel & Electric Coops

Providing household energy audits, and comprehensive improvements with energy efficiency (EE) and weatherization services is a top priority for GHG reductions. There are government grants, rebates, loans, subsidies, as well as help from Efficiency Vermont and VSECU offers low-interest loans for these projects. EE projects include EE heaters, heat pumps, wood stoves, solar hot water, solar heating, HVAC, insulation, lighting, appliance retrofits, shell improvements, and so on. Home EE can increase electric efficiencies over 30-40% and heat efficiencies over 25%. Smartphone applications can also help improve EE. It's possible to further improve EE with trade-in programs where people get rid of (or don't use) their washers, dryers, and refrigerators/freezers, in exchange for laundry and food delivery services in collaboration with the EV-Car-share Coop. (A possible job opportunity is local manufacturing of clay evaporative fridges for net-zero household appliances for net-zero homes.) The Fuel & Electric Coop could also help facilitate Biofuel Forestry projects for biomass fuels, for wood-fired district heating, and oil to wood conversions for schools, colleges, hospitals, government buildings, industrial parks, and so on. The coop could also incentivize households to install a wrap-around greenhouse ("Nature House" construction). The Coop would need to facilitate job training for skills, experience, education, and certification qualifications in energy auditing, instillation, and professional services related to the Coop. The Coop should be aware of significantly expanding flood zones and other hazard zones that are not reflected by current zoning documents, to prioritize fuel/EE/PV upgrades for households outside of hazard zones, to prevent wasted investments in high-risk areas. The Coop can also help facilitate PV Leasing, where, for example, a 5kW PV system has a NPV of \$5,500 or 10% investment return, where VSEU low-interest loans make it incredibly affordable.

Fuel & Electric Cooperative Membership requirements and/or options include:

- Trade-in/retire inefficient and large appliances to help finance Membership costs.
- Trainings and jobs in EE/PV, weatherization, installations, professional services
- Trainings and jobs in biofuel forestry and agroforestry, and greenhouse management.
- Installing 5kW PV systems for Net Zero houses with EV Car-share & Ag Coop Memberships.
- Increased building code requirements for EE, with EE abatements/offsets for GHG Taxes
- Develop and promote stretch codes that are more stringent, with expanded code enforcement.

3. Establish Food & Agricultural Coops

It's possible for a Food & Ag Coop to create jobs to increase local food production and establish local food grocery stores, cafes, and health cooperatives as a community hub (to reduce VMT). The Coop could also be involved with Agroforestry (see Carbon Farming Solution), tree nurseries, composting projects, greenhouses, and providing support for numerous small-scale home businesses focused on highvalue production of agricultural products such as sprouts, kombucha tea brews, mushrooms, herbs, wheatgrass, kimchi/fermentations, bamboo, and so on (and, depending on legislation, hemp and marijuana products) - and larger enterprises for agroforestry and perennial grains (and milling jobs, and sprouted bread products). The coop could also create local labels that educate people about the social health costs of junk foods such as dairy, meat, and high-sugar/fat/salt foods that are responsible for upwards of 90% of healthcare costs. The Coop goal is to shift local grocery budgets from 93-95% on food from out of state, to purchasing local foods. The Coop could facilitate nutritional classes, cooking classes, community dinners (with free rides with EV-car-share Coop), feasts, festivals, and so on. The Food & Ag Coop could provide food services to institutional buyers such as schools, hospitals, government, and industrial parks, to increase efficiencies. The Coop could also include programs for drug/addiction treatment programs, recreation programs, and other healthcare programs. The Food & Agricultural Cooperative Membership work/job requirements and/or options may include:

Coop Healthcare Insurance Public Option with a Whole Food, Plant Based (WFPB), which can reduce healthcare costs over 80%, and saves the average person about \$10,000 per year, and is recommended by Kaiser Permanente, the largest HMO in the world. The Coop can create an insurance program for a Public Option that can create significant leverage in the healthcare market and significantly improve people's health and quality of life as well, especially combined with local organic foods.

- Compost pick-up and delivery services.
- Greenhouse maintenance services.
- Local grocery/Cafe and/or Health Coop services
- Work producing foods: especially perennial grains and agroforestry as the best options for climate mitigation.
- Deliveries for schools, colleges, hospitals, government, businesses, and households
- Provide food for local community dinners, feasts, and festivals.

Other Comments:

- 1. The VCAC should consider integrating into their Action Plan that EE/PV/Renewable upgrades to households or other properties should take into consideration the significantly expansion of the Hazard Zones, especially the flood zones (FHZs). Experience is showing that the 500-year and 1,000-year flood zones ("Zone X") are being flooded more and more, and even though out-dated flood zoning maps do not reflect these changes (and explicitly say that climate change should not be considered!) these high-risk hazard zone areas should not be beneficiaries from (EE/Renewable Energy) investments. The VCAC should consider how other adaptation priorities are important considerations for mitigation actions.
- 2. The VCAC appears to significantly underestimate and under-appreciate the role of agriculture and diet for GHG reductions, not accounting for important social, health, and environmental costs that are externalized. Estimates of the GHG impact of agriculture ranges from a low of 11% used by VCAC up to over 50%, by World Bank Economists.
- 3. The CEP & VCAC appear to have a conservative bias that under-appreciates the magnitude of the challenge: The state's goal of reducing emissions 90% by 2050 falls far short of the recommended 90% reductions by 2030 proposed by climate experts such as Kevin Anderson at the Royal Society, implying that we need 10-15% reductions in GHGs per year and negative emissions after 2035 for authentic climate leadership, to prevent 2-3C. (Carbon crebits)
- 4. Consideration of the Verified Emissions Reductions (VER) sector, a multi-billion dollar sector where GHG reductions are measurable, verifiable, and marketable. Projects could partner with certification programs and corporations such as CIAR (forestry/ag), Plan Vivo (Community Agroforestry), Gold Standard (EE), and so on. Coops/Businesses could sell VERs on a local, state, national or international market for business/corporate responsibility, divestment-reinvestment campaigns, pre-compliance, competitive advantages, branding, and public image.
 - 5. The CEP & VCAC do not recognize the very important perspective of traditional knowledge (TK), because it is "grey literature" outside of the peer-reviewed scientific consideration. This TK perspective and worldview is a spiritual/mystical/ancient perspective about how human energies have a significant impact on the environment in ways that are recognized by quantum biology (with nonlocal entanglement). Scientific research has demonstrated this TK by showing how focused human energies can accelerate GHG reductions through the acceleration of photosynthetic rates as well as purify water, influence the weather, and heal diseases, among other remarkable effects. This TK worldview and it's practical application are described in the book, Climate Change Yoga, is a free PDF at ClimateChangeYoga.com.

Thank you for your consideration. Best of luck with your work.

Sincerely,

Erik Phillips-Nania Burke, VT ephillie@gmail.com

Hi, my name is Hannah Huber and I live in Montpelier. Hank you for organizing this session denignt.

The millennial generation in this country is projected to lose 8 trillion dollars from inaction on climate change. And according to climate scientist Michael Mann, we're on track to hit a global temperature rise of 2 degrees Celsius in the year 2036, when I'll be 42. So I wonder, this retirement fund that I should start saving for, in the year 2064 when I'm 70, will it actually be my family's survival fund? If I even dare have a family. And you know, when this is all becomes too much to think about, you can't even go for a walk in the woods with your hair down because the chances of getting bitten by a tick and getting Lyme disease are too real.

We're so cautious about climate policy, but life is dangerous under this climate, and to be actually cautious for the sake of Vermonters' lives and our economy we need bold solutions fast. We need to achieve a low-carbon economy that's affordable for the low and middle-income class, and I think we need to make that future clear by putting a price on carbon pollution, and investing the revenue in the low and middle-income class. We have poor public transportation systems, and we have the 2nd oldest housing stock in the country, so I would like to see a carbon price geared towards improving these things, since they affect quality of life and are the most responsible for Vermont's carbon emissions.

Thank you.

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Vermont Climate Action Commission
St. Johnsbury Listening Session 9.13.17
Mark Whitworth Comments

In Vermont, too many discussions of climate action begin and end with energy development. This obsession with energy development has served the energy industry very well, but it has resulted in counterproductive policies that are causing unacceptable damage to Vermonters and Vermont's environment. No region of the state understands this better than the Northeast Kingdom. And no project in the state exemplifies this better than Green Mountain Power's Lowell wind energy plant.

GMP says that its Lowell plant saves the emission of 74,000 tons of carbon dioxide per year. That's the amount of carbon emitted by Metro New York City traffic in less than half a day. If the Lowell turbines operate throughout their promised 20-year lifespan, they will have saved less than two weeks' worth emissions from New York traffic.

In exchange, Kingdom Community Wind has created deep divisions in our community—those divisions persist to this day. I know that industry lobbyists will cite Lowell's votes in support of the project. But, let them hold a vote in neighboring Albany whose residents live in the shadow of the turbine and suffer more of the impacts. Ask them to explain the 2013 vote in neighboring Eden where 59% of voters opposed wind development. Let them explain the 2015 vote in Irasburg where a measure to oppose wind development passed 274 to 9.

The community is not the only thing that the Lowell wind project has fragmented. It has fragmented wildlife habitat—wildlife habitat that was recognized for its value by the international Staying Connected Initiative.

Furthermore, the project's failure-prone stormwater management system threatens downslope property and infrastructure. And it compromises the headwaters of the Mississquoi River. This undermines our effort to clean up Lake Champlain.

We need to abandon the policies that have been promoted by energy developers. We need to understand that we cannot mitigate climate change through the creation of more and more energy sprawl. We need to acknowledge that there is no magical climate economy that is so fabulous that it justifies the endangerment of our existing economy.

In developing your recommendations for Governor Scott, please begin by considering the impacts of climate change that Vermont will experience most directly. Please start with loss of biodiversity, loss of food security, degradation of our water resources, and the increased

vulnerability of our homes, farms, businesses, and infrastructure that severe weather events will bring about.

Please consider our defenses against these impacts: our wildlife habitat, mountains, rivers, and farm fields.

Any strategies that degrade our defenses against the impacts of climate change do not belong in our climate action plan.

There are currently three wind projects being proposed for northern Vermont. These projects would compete for access to a constrained grid with existing wind projects. That is, these projects offer the same damage to Vermonters and the environment that the existing projects created—only without the meager carbon benefits. These projects confirm what many Vermonters have known for a long time: if you look behind the words of concern for the climate, you find greed. This commission should recommend that such projects be rejected out of hand in favor of genuine community projects.

Energy development can and should be part of our climate action plan. However, our energy development strategy should focus on projects that are truly deserving of the name "community." These projects should be designed and developed by Vermonters to meet the needs of their own communities. These projects should be sources of pride that bring communities together, not tear them apart.

I have to take issue with a statement within the press release announcing this listening tour. Deputy Secretary Peter Walke is quoted saying, "Vermont's response to climate change presents a tremendous opportunity to continue growing the state's economy while protecting the environment and improving our quality of life." The idea of "growing the economy" is one of those boilerplate sentiments that everyone is supposed to get behind; it's so unquestioned that it's embraced by every national political leader I'm aware of, and by all three of Vermont's political parties.

But sooner or later we need to acknowledge that economic growth is a major part of the problem. Burning fossil fuels is only a proximate cause of climate change - the more fundamental cause is the economic activity for which all those fossil fuels were burned. Those same activities are the root cause of the many other environmental problems, from microplastics in the water supply, to dead zones in the oceans, to the loss of wildlife habitat, the extinction of species - and on and on. The economist Kenneth Boulding once said that "the only people who can believe in infinite growth on a finite planet are madmen and economists," and yet policymakers like I want to get you from yourselves seem quite willing to join that club. I'm not sure why the press release couldn't have limited itself to touting the benefits of "protecting the environment and improving our way of life." Surely, if there's any purpose to "growing the economy" it should be to improve our quality of life, so that base was already covered. And I might add that there's plenty of evidence to suggest that economic

> One problem with having economic growth as a policy goal alongside mitigating climate change is that it skews the options before us: clear-cutting forested land for solar panels and blasting ridgelines for wind turbines would arguably add to economic growth, and are therefore seen as viable options; deep cuts in needless consumption might actually do more to limit emissions - both here and where those consumables are produced - but that option isn't even on the table because of the presumed damage to the economy.

growth past the point of meeting basic needs actually erodes our quality of life.

For too long, economic growth has been considered a categorical imperative. It's time we consider ways of improving our quality of life that don't depend on "growing the economy". If we really want lasting solutions to our long list of problems - of which climate change is just one - we need to stop talking like madmen.

and I hope the commission doesn't make it a lithus test for its recommendation



Energy Independent Vermont: Scott's commission must explore carbon pollution pricing

July 26, 2017

Last week Gov. Phil Scott took another step towards real climate action. He signed an executive order creating a Vermont Climate Action Commission and reaffirmed the climate and clean energy goals set forth in the 2016 Comprehensive Energy Plan.

In this era of federal backsliding, Gov. Scott has sided with the facts. Further, he stacked the commission with thoughtful Vermont leaders experienced in building consensus to get tough things done. There doesn't appear to be a climate science denier among them.

He tasked the commission with developing a strategy to reduce greenhouse gas emissions that:

- Spurs economic activity, inspires and grows Vermont businesses, and puts Vermonters on a path to affordability;
- Engages all Vermonters, so that no individual or group of Vermonters is unduly burdened; and
- Provides solutions for all Vermonters to reduce their carbon impact and save money.

These are thoughtful parameters, though there should be one more: The commission's

recommended solutions must be commensurate to the challenge.

As the new commissioners will soon learn, despite decades of lofty rhetoric and good intentions, Vermont's total carbon emissions are up since 1990. We are not on pace to meet any of the state's three sets of greenhouse gas reduction goals: the goals that Gov. Scott voted for as senator, the Paris Climate Accord goals he committed to by joining the U.S. Climate Alliance last month, or the Comprehensive Energy Plan goals he reaffirmed in his executive order last week.

In order to achieve any of our climate goals the commission must recommend more comprehensive strategies than have been tried to date. Without bolder recommendations – and swift action by the governor and General Assembly – the naysayers who mock gubernatorial commissions as the place that good ideas go to die will be proved right once again.

If the commissioners and the governor are serious about their assignment, there is an effective climate strategy that conforms to all of the governor's conditions and is working elsewhere: carbon pollution pricing.

As President George W. Bush's Treasury Secretary Henry Paulson wrote in the New York Times, a price on carbon pollution would "unleash a wave of innovation to develop technologies, lower the costs of clean energy and create jobs." Want proof?

- California implemented a price on carbon pollution in 2013, and has created 1.5 million new jobs since then. That's almost three times as many new jobs in California as there are Vermonters.
- The Canadian province of British Columbia introduced a carbon pollution price in 2008 and their economy's growth has outpaced every other Canadian province the last three years running. In fact, the policy has been so successful that Prime Minister Justin Trudeau is implementing a nationwide carbon price next year.
- And look no further than Vermont. Republican Gov. Jim Douglas authorized Vermont's first price on carbon pollution in the electric sector by joining the Regional Greenhouse Gas Initiative and it is working. The economies in the nine RGGI states are growing faster and emissions from the electric sector are falling faster than in those states outside the compact. As the Vermont 2017 Clean Energy Industry Report notes, "since 2013, clean energy employment has grown by 29 percent in Vermont, which amounts to a total of just over 19,000 jobs." You can't argue with that success.

There is a reason that economists from across the political spectrum – distinguished number crunchers like Joseph Stiglitz, Lawrence Summers, Jeffrey Sachs, Robert Reich, Gregory Mankiw, Martin Feldstein – all support carbon pollution pricing: It's smart economics.

By returning the carbon pollution revenue to Vermonters in the form of tax cuts or dividends every Vermonter would be engaged. We would have both the incentive and the means to transition to the cleaner, more advanced technologies of the 21st century – growing jobs and putting many more Vermonters to work.

Finally, when it comes to saving Vermonters money, the sooner we transition off of fossil fuels the better. Even at today's low gasoline prices, it costs about one-third less to drive an electric vehicle in Vermont than one powered by an internal combustion engine. An electric heat pump delivers BTUs to a home or business more cost-effectively than an oil burning furnace. Carbon pollution pricing is a market-driven solution that encourages adoption of these and other low-carbon, low-cost technologies that save Vermonters money.

The transition to the clean energy future is a winwin for the Vermont economy and our climate.

If admitting there is a problem is the first step to fixing it, then Gov. Scott took that step last week. The Climate Action Commission has a critical assignment—and an opportunity. Identifying and advancing the policy solutions that meet the measure of the problem, like carbon pricing, will turn the challenge Gov. Scott has put forward into the job-creating, money-saving, energy-innovating opportunity it provides.

Editor's note: This commentary is by Thomas Hughes, who is the <u>Energy Independent</u> <u>Vermont</u> campaign manager.

Comments to Governor Scott's Climate Action Commission

September 14, 2017

Dear Commission Members,

I attended the hearing in St. Johnsbury last night (Sept. 13) but did not make a verbal comment. I would like to submit three actions that I hope the Committee will consider implementing.

- 1. <u>Conservation</u>. Before producing more and more energy, even if from renewable sources, we could reduce our consumption of energy greatly by giving Vermonters economic incentives to insulate their homes and offices, buy efficient cars, get rid of wasteful appliances, etc..
- 2. <u>Small-scale energy installations</u>. Please consider small-scale energy installations help communities install them and become energy independent rather than industrial installations. Small and local is the Vermont way. I am especially against industrial wind towers on our beautiful mountaintops. I think that people in Burlington would think twice about wind towers if instead of putting them in our Northeast Kingdom hills, they would put them in Lake Champlain.
- 3. <u>Carbon Pricing</u>. Lead the nation by adopting some form of carbon pricing. This should be a nationwide policy, and Vermont could lead the way.

Thank you very much for your efforts, and for soliciting public comment.

Sincerely, Lynne Lawson Peacham