

February 28, 2021

Montgomery County, Maryland  
101 Monroe Street  
Rockville, MD 20850

Re: Montgomery County Climate Action Plan

To Whom It May Concern:

As a Montgomery County resident, I recently became aware of the county's proposed Climate Action plan that is currently out for public input. As a county citizen, I am opposed to the general approach of the action plan. Although today (February 28, 2021) is the deadline for submitting comments, I would appreciate the government's consideration of these comments.

In reviewing this plan, the entirety of the recommendations made throughout the plan can be summarized in one phrase: 'electrify everything.' While I would acknowledge that a transition to a cleaner economy with clean policies is a laudable goal, and one for which I agree, I believe the 'electrify everything' approach is misguided.

First, this approach completely eliminates consumer choice. For example, recommendation B-2, *Electrification Code Requirements for Existing Residential Buildings*, would mandate a shift to all-electric appliances in the home. Through its implementation, it would require existing homeowners to replace any gas appliances or equipment before the home can be sold. Likewise, as part of any renovation of an existing home, it would require that any replacement equipment, e.g., furnace or water heater, be accomplished with an electric appliance. Both of these are draconian measures that would eliminate the future use of any type of gas appliance, natural gas or propane, an action that could potentially expose the county to restraint of trade considerations.

Other recommendations such as B-5, *All-Electric Building Code for New Construction*, and B-6, *Ban Natural Gas in New Construction*, purport a similar approach that eliminates any other energy source except electricity. To be clear, electricity is not an energy source in and of itself. It must be produced, and as such, it is the byproduct of the consumption of another energy source, e.g., natural gas, renewable fuels, etc., generated at power plants much further upstream from its point of use.

The 'electrify everything' approach also fails to recognize what impact an increased electrical load (which would surely result from implementation of these recommendations) would do to the overall power generation grid. It neglects to account for the fact that approximately 70 percent of electrical energy generated upstream at a power plant is lost in its transmission and distribution to the point of use. Low-carbon gaseous fuels such as natural gas and/or propane retain anywhere from 85-90% of their energy from its source of production compared to electricity at about 30%.

Consumers should have the freedom to choose their source of energy and not be dependent on government-regulated electricity. Montgomery County residents do not want government-appointed groups or task forces nor politicians deciding what form of energy they should use.

Additionally, forced residential electrification would increase the average residential household's energy costs by between \$750 and \$950 annually. Basically, it would impose a form of regressive tax on the poor and middle class because it compels users to use electricity, which costs three to four times more than natural gas or propane on an energy equivalent basis. These higher costs could force lower income citizens to choose between heating their homes and or meeting other critical needs such as medicine and food. Moreover, this is completely counter to the county's stated goal of achieving social and environmental justice.

Finally, the county's desire to reduce greenhouse gas emissions by 80% by 2027 is a reflection of a broader goal of averting the possibility of catastrophic climate change. To accomplish this goal, the county is endeavoring to prevent the further burning of hydrocarbons and the conversion of all of our residential, transportation, commercial and industrial systems so that they are powered solely by electricity with much of that electricity coming from wind turbines and solar panels.

One only needs to look at the recent effects of the extreme cold weather in Texas to understand the perils of concentrating all of our energy risks on a fragile electric grid, which was exposed under the surge in demand caused by the extreme cold weather. Reliance on a single network, i.e., the electric grid, would make nearly every aspect of our society prone to catastrophic failure if, and when, a widespread or extended blackout occurs.

The one aspect of energy usage that transcends its impact on the environment is its impact on our energy security. And, the most fundamental aspect of this is that we all have enough *reliable and affordable* energy of whatever type so that we don't freeze to death during cold spells in the winter (or suffer heat stroke during summer heat waves). No matter how environmentally-conscious a consumer is, no consumer will want to sacrifice the quality of the environment inside of their home for the one outside of it.

In conclusion, I oppose the broad recommendations of the climate action plan that take an 'electrify everything' approach. Rather than promoting the use of only one form of energy such as electricity, addressing climate change can be accomplished through the use of a variety of energy sources that should include low-carbon fuels such as natural gas and propane.

Thank you for your consideration of these comments.

Sincerely,  
Mike Caldarera  
Resident - Montgomery County, MD