Dear People,

My name is René Carver and I live in Tompkins County, New York, which has been my home county for 60+ years. This is an incredibly important moment as you know. As each moment that passes without consequential action to address the Planetary Crisis caused by co2 emissions takes the world further along the path of catastrophe. As a trained Energy Navigator in the Cornell Cooperative Extension program and one of thousands of trained Climate Reality Leaders in New York State, I have become increasingly aware of the need to modify societal behaviors in order to save our planet.

Since the buildings in New York State account for approximately 32% of the green house gas emissions in New York State, this is naturally an area where great focus can result in great benefit.

First and foremost, I would urge the Council to immediately fund and start a sustained statewide education and awareness campaign on the benefits of the healthy, climate-friendly choices by consumers of heating and cooling, hot water, and cooking systems. This education campaign is necessary to counter the relentless and massive disinformation crusades by fossil-fuel interests and status-quo forces who've spent decades perfecting their chicanery, first to deny climate science, and now to cast doubt on the solutions. Given their long and expansive track record of weaponizing disinformation to sustain the extraction and burning fossil fuels, the absence of a public information component in the scoping plan is a surprising, but grave oversight.

Why do we need to get off gas now?

We are in a critical stage of the climate crisis driven by continued greenhouse gas (GHG) emissions and must start reducing emissions dramatically in order to avert the worst effects of climate change. At the very least, we must stop subsidizing and incentivizing the expansion of fossil fuels.

Buildings account for a third of New York's GHG emissions, with space and water heating being the largest contributors. It is widely accepted that phasing out the use of on-site fossil fuels such as heating oil and methane gas and shifting to electricity as the sole energy source for buildings, while simultaneously pursuing weatherization, energy efficiency, and improved building codes, is the only feasible path to decarbonizing building operations. Once electrified, the GHG emissions associated with buildings will decline as more distributed and centralized carbon-free sources of electricity are added to the grid.

Appliances last 10-15 years; buildings can last decades. Every new building with on-site fossil-fuel combustion is an avoidable costly mistake that locks in an unpredictable and polluting fuel for generations, or will require an expensive conversion in the future.

How do we get off gas?

We must do everything we can to help transition NY homes and businesses - the largest source of GHG emissions in NY - to net zero. I congratulate the Climate Action Council for successfully mapping a transition to electric heating which is BOTH affordable AND reliable.

For some, the costs of heating a home can be crippling in the winter and the lack of air conditioning in the summer can put them in peril. Electrification of buildings, in combination with weatherization and other efficiency improvements provides a path to affordable living for those who struggle to maintain acceptable living conditions. For others, it provides a path to more predictable living expenses and a cleaner environment. For all of us, it provides a path to a cleaner and better future.

I wholeheartedly support immediate upgrades to codes and standards in support of a net-zero future. I am concerned that timelines for some phase-outs are too long and details for phase-ins of alternatives are missing. Given the urgency of the climate situation, we need a definitive moratorium on all new fossil-fuel-based infrastructure with no allowances for expansion other than to maintain reliability during the transition to 100% electric heating. Such a moratorium is critical for preventing further delay in the transition away from fossil fuels and avoiding further harm to the planet.

I strongly support the focus of the Scoping Plan on eliminating natural gas use in the buildings sector, including decommissioning of natural gas infrastructure as rapidly as feasible while still maintaining reliability and affordability. I strongly support the building/zoning code changes to phase out the use of natural gas in heating systems and other building appliances.

Calling the bluff on false solutions

I reject the use of natural gas as a supplemental heat source "at times of peak need". This specious exception is not a true need and serves only the special interests of natural gas companies to maintain pipeline infrastructure indefinitely and to continue to profit from harming our environment by conducting business as usual. Other ruses being used by the corrupt gas utilities to deter or slow the transition from fossil gas are fairy-tale solutions like Renewable Natural Gas and Hydrogen.

Hydrogen is completely unsuitable for domestic use! Its low energy density makes it cost prohibitive for heating because delivering the equivalent amount of energy to fossil methane would require pumping five times as much hydrogen into homes. The fact that it is hard on steel and electronics and has very different physical and combustion properties compared to fossil methane means that it will require significant infrastructure upgrades and new appliances designs that do not exist.

Renewable natural gas is hardly renewable, is essentially methane, and will leak just like fossil methane contributing 80 times more than carbon dioxide to short- and medium-term global warming. Burning it in inside homes will release the same deadly indoor pollutants that are released by fossil methane. Finally, even in the best-case scenario, the total amount of available supply of the so-called renewable natural gas will displace only a fraction of the fossil gas.

What else must happen, in addition to immediate adoption of all-electric building codes?

One major impediment to building electrification is the set of archaic laws and regulations that create an uneven playing field between gas and electric space and water heating options. The current public service law not only provides for the gas utilities to pass the cost and the risk of gas infrastructure expansion on to the ratepayers, but in many cases, it also mandates it. For example, the "100-foot rule" the "100 foot rule" (governed by 16 NYCRR §230.2(c), (d), and (e) of the Public Service Commission's regulations) requires a gas utility to provide an applicant with a minimum length of main and service line extensions at no cost to the applicant. A conservative analysis by the New York Geothermal Energy Organization included in their testimony submitted to the Public Service Commission shows that just this subsidy costs New York's existing gas customers at least \$200 million every year by way of additional delivery charges. This is an unconscionable subsidy for fossil gas.

I support the elimination of these implicit subsidies, as well as ending rebates for purchase of natural gas equipment. Furthermore, I support incentivizing building owners to transition to electric heating and appliances before the end of the useful life of existing equipment.

Summary

New York State must move full steam ahead, without delay, towards making electricity the principal energy source for powering its residential, commercial, and public buildings while rapidly weaning itself off on-site combustion of fossil fuels such as fossil methane

gas and fuel oil. The state must eliminate all forms of subsidies that encourage the use of fossil fuels in buildings. Effective and economical solutions are available today; political will is the only hurdle in the way of building electrification in New York. Electrification and efficiency-enhancement of buildings are not only cost-effective ways of reducing emissions but also have tremendous health and economic benefits.

The Climate Action Council put forth three scenarios for our climate future. I am advocating for Scenario #3, which includes low-to-no bioenergy and hydrogen and the simultaneous acceleration of electrification of both buildings and transportation to ensure clean air and a healthy environment.

Certainly the work of the CAC is daunting to say the least. The task at hand is monumental - and the consequences if done poorly will result in catastrophe. Thank you for your efforts to sift through all the information that has come before you. I wish you wonderful clarity of thought, discernment of truth, and awareness of falsehoods. Like so many who are submitting comments, my gain in doing so is the hope for a more better future for the planet and all it's inhabitants. Unlike those who will be requesting delays and studies and submitting outright falsehoods I do not have any path to financial benefit from elimination of Green House Gas emissions.

Once again, thank you for your efforts to bring about a better environmental future for us all.