

Hello. My name is Eve Morgenstern and I am a resident of Beacon, NY in Dutchess County. I am the co-chair of my Climate Reality chapter, Hudson Valley & Catskills. I am also a documentary filmmaker and photographer.

I am motivated to comment on the scoping plan because I am a mother who is deeply concerned about our warming world and the inability of our federal government to take the crucial steps to achieve a net zero carbon economy and prevent the worst impacts of climate change. I am inspired by this New York climate law - CLCPA and I hope we can work to make all of the goals a reality. Today I want to comment on buildings.

A key omission in the scoping plan

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 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. I encourage the Council to add a chapter on community-specific outreach, awareness, and education in the Final Scoping Plan with recommendations for assuaging New Yorkers disinformation-induced fears about the CLCPA and informing them how the law will be implemented and what are its climate, health, environmental, and economic benefits.

Sector-specific goals and enforcement mechanisms

The Draft Scoping Plan does not ensure that the CLCPA targets are met. The Draft Scoping Plan: (1) at times does not clearly specify greenhouse gas (GHG) emissions reduction targets for certain sectors; (2) adopts targets that are inadequate in relation to the overall CLCPA targets (i.e., an 85% reduction in GHG emissions by 2050); and (3)

includes too many proposals that depend on voluntary action by industry and residents rather than legally enforceable mandates. The Final Scoping Plan must specify the level of mandated reductions in greenhouse gas emissions and co-pollutants that each industry sector must achieve by the years specified in the CLCPA, as well as a timeline for achieving such reductions. The Final Plan should also specify the state agency or agencies responsible for enforcing the CLCPA targets for each sector. Taken together, the mandated industry sector reductions shall achieve the CLCPA targets.

In addition to targets by industry sector, the Scoping Plan must specify in detail the regulatory mechanisms by industry sector that are necessary to ensure that each sector can achieve its goals, and the regulatory steps, including legislation, necessary to achieve these goals.

The Council must review the state's regulatory structure by industry sector to determine what legislative and regulatory changes are necessary to ensure that structures are put in place to mandate that all businesses in New York comply with the clear GHG and co-pollutant reduction targets by a schedule that conforms with the CLCPA, and put recommendations for such changes in the Final Scoping Plan. When appropriate, GHG reduction targets should be set for individual large businesses, like utility companies.

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 and accumulation of soon-to-be-stranded assets.

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 that must end.

Utility regulation must be aligned with the State’s climate justice and emissions reduction targets, and the provisions of the public service law relating to continuation of gas service must be repealed. The legal basis and subsidies driving the expansion of the gas system must be removed. The NYS Department of Public Service must adopt rules and develop a statewide gas service transition plan that is consonant with decreasing gas sales and decommissioning the gas system in stages.

Additionally, I support 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.

Utility thermal networks

In order to effectively decarbonize our buildings at the scale necessary to meet the CLCPA’s timeline, we need to build out emissions-free thermal energy networks that share heat sinks and sources and utilize high efficiency ground source heat pumps over the next two-decades across the state. Utility-scale thermal networks can connect multiple buildings together and capitalize on thermal energy exchange using sources like geothermal boreholes, surface water and even wastewater.

Thermal energy networks will scale building decarbonization and reduce costs for customers with little impact to the electric grid even during peak periods. Utilities will be able to reduce the costs of electrifying buildings by spreading the costs of thermal networks across many customers and many years. These networks also offer a clear pathway for workers with pipe skills to transition to thermal energy networks for all-electric buildings.

In order to streamline a rapid roll out of utility thermal networks, to keep customer costs down, and to simultaneously smoothen the phaseout of gas, the cost of utility thermal networks must be added to the gas rate base. A neighborhood-by-neighborhood plan of replacing aging gas infrastructure with thermal energy networks will help transition buildings from gas to electric heating while keeping the size of the infrastructure as well as the number of supporting ratepayers more or less constant. This will not only help the new customers of these networks, but will also help prevent the delivery rates for existing gas customers from spiraling upwards.

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.

Thank you so much for your hard work on this. I'm sure it is a tremendous amount of work to consider all of our comments and I greatly appreciate it. We have been working so hard on this effort. Thank you so much to listening. Best, Eve Morgenstern