

I am a homeowner; we converted our house to all-electric operations last year because that made the most sense economically and for our home's resale value as both our central Air Conditioner and gas-fired furnace were reaching end-of-life. Upon replacing our furnace with a ground source heat pump, we replaced the gas powered dryer and cooking range with electric counterparts, and we closed our gas account with our utility. Every day, as new reports of the hazards of gas stoves come out, we grow more confident that we made the right decision.

Our experience shows two things.

1. First, all-electric homes are practical and desirable. Since we converted a dual-fuel home to all-electric, we incurred some extra costs related to repairing sheetrock etc. A new all-electric home would not only avoid the conversion costs and complications, but also the cost of gas-related plumbing, and prospective buyers would find it more desirable. This should fetch higher margins for the astute builders who have kept up with the latest technology trends.
2. As we stopped paying the fixed monthly charges for gas delivery, the overall cost of the gas infrastructure is now borne by one less customer. As more New Yorkers recognize the benefits of home-electrification, the customer base will continue shrinking. Therefore, we must strive to shrink the gas infrastructure as well, or at least not expand it.

My detailed comments with specific recommendations for getting off gas are below, but it is clear that the time for an all-electric new building mandate is now so that we don't keep digging ourselves deeper into the hole, both fiscally and in terms of the climate.

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. 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.

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.

Why do we need robust legislation for the gas system transition

New York urgently needs to align its regulation and oversight of gas utilities with the climate and equity mandates established by the CLCPA. New York's current public service law is not compatible with the CLCPA. The law promotes gas system expansion by establishing a gas utility obligation to serve any customer upon request while providing that existing customers

subsidize new service connections, all of which move the state away from the important climate justice directives and binding emissions limits in the CLCPA.

In order to meet the CLCPA's climate and equity mandates, New York will need to drastically reduce gas use. This poses a particular challenge for gas utilities because their business models are currently premised on expanding gas infrastructure and services. Allowing the tension between the public service law and the CLCPA to go unaddressed will significantly delay achievement of the CLCPA mandates while dramatically exacerbating affordability and equity challenges. Low income New Yorkers will suffer the most if the state fails to properly plan for the inevitable contraction of the gas system, as they will be among a shrinking group of customers burdened with the cost of maintaining an increasingly obsolete distribution network.

Aligning regulation and oversight of gas utilities with the CLCPA's climate and equity mandates requires removing the legal basis and subsidies for the expansion of gas systems, as well as adopting rules and business practices that are consonant with decreasing gas sales and, where appropriate, the decommissioning of sections of the gas system.

The Public Service Commission must be granted the authority and direction to align gas utility regulation and system planning with equitable achievement of the CLCPA's climate justice and emission reduction mandates.

The path to getting off gas: Specific recommendations

I strongly support removing the legal basis and subsidies driving the expansion of gas systems and legislatively directing the PSC to adopt rules and develop a statewide gas service transition plan that is consonant with decreasing gas sales and decommissioning of the gas system in an orderly but expeditious manner. Here are some specific recommendations for the Council for inclusion in the Final Scoping Plan:

1. Section 4, subdivision 1, of the public service law must be amended to provide that the PSC has "all powers necessary and proper" to facilitate achievement of the CLCPA's climate justice and emission reduction targets as set forth in article seventy-five of the environmental conservation law.
2. Section 5, subdivision 1 and 2, of the public service law must be amended to direct the PSC to include utility sector achievement of the CLCPA's climate justice and emission reduction targets as one of the core planning objectives in its "public service responsibilities".
3. Section 30 of the public service law must be amended to remove a residential customer's legal entitlement to utility gas and steam services, while maintaining this entitlement for electric service. The PSC must be directed to (a) develop a statewide gas utility service decarbonization plan, (b) actively encourage a transition away from

combustible fuels, and (c) ensure that all residential customers have access to electric heating and cooling services.

4. Section 31, subdivisions 1,3, and 4, of the public service law must be amended to implement the policy established with respect to applications for electric and gas services. The utilities must be required to provide clear, timely information on incentives and opportunities for installing energy-efficient equipment and other measures that provide alternatives to gas use. The 100 ft rule subsidy, which provides ratepayer-funded utility incentives for the expansion of utility system infrastructure, must be removed.
5. Section 66, subdivision 2, of the public service law must be amended to create a new subdivision 12-e that would grant the commission authority to order the curtailment or discontinuance of the use gas for any customer, group of customers, or section of the gas distribution system, where the commission has determined that such curtailment or discontinuance is reasonably required to implement state energy policy. It should also require PSC to review a gas utility's capital construction plan in gas utility rate proceedings and to establish a non-pipeline alternative process to examine feasible alternatives to construction of new gas infrastructure. The PSC must be empowered to require the electric utility with a service area overlapping the service area of the gas utility to participate in the non-pipeline alternative process, including participation in financing, where such alternative includes conversion of gas customers to electricity usage.
6. Section 66-b of the public service law must be repealed to remove the entitlement to continuation of gas service following the demolition and reconstruction of any structure owned by a customer.
7. A new section 66-s to the public service law must be created to prohibit gas utilities from expanding gas service to new geographic areas where gas service was not previously available.
8. Section 66-g of the public service law must be repealed to remove the requirement that utilities enter long-term contracts to purchase or wheel electricity produced from indigenous natural gas supplies when economically reasonable.
9. A new section 77-a to the public service law must be created to require the PSC to initiate one or more proceedings to better align its regulation of utility services with the timely achievement of the CLCPA's climate justice and emission reduction targets. Specifically, the PSC must be required to take the following actions:

(a) Conduct a review of the public service law and commission rules and policy guidance to identify barriers to the timely, equitable achievement of the CLCPA's climate justice and emission reduction targets. Report to the legislature on its findings, actions it plans to take, and

make recommendations for further statutory amendments that may be needed to facilitate the timely achievement of such targets.

(b) Amend the commission rules and regulations governing allowances for the extension of gas and electric service. Eliminate line extension allowances for new gas service. The commission should increase line extension allowances for new electric service, including additional allowances to buildings that are made ready for beneficial electric loads such as those with electric vehicle charging facilities or grid interactive buildings.

(c) Revise the PSC rules and regulations for conducting benefit-cost analyses to ensure that the methodology and the base financial and framework assumptions support achievement of the CLCPA's climate justice and emission reduction targets and that these methodologies include the cost of inaction or delayed or diluted action.

(d) Clarify that municipalities are not preempted from requiring all-electric buildings, zero-emission buildings, or otherwise prohibiting new gas service connections for new buildings and major renovations.

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 85 times more than carbon dioxide to 20-30 year global warming. Burning it 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.

No entity in New York has identified a viable strategy for decarbonizing the building sector using RNG without assuming that New York utilizes most of the theoretically available RNG across the entire Eastern United States. Setting aside whether such levels of RNG are even technically

possible to obtain in New York, any strategy that relies on New York using other states' limited supplies of RNG is not a pathway to nationwide climate success.

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.

Please note that amending Section 30 of the Public Service Law to remove a customer's legal entitlement to utility gas and steam services is critical for the replacement of gas infrastructure with utility thermal networks. Otherwise, a single customer insisting on gas can stymie the transition of an entire neighborhood.

Conclusion

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 gas. The state must eliminate all forms of subsidies that encourage the use of gas in homes and buildings. **The 100 ft rule subsidy and the legal entitlement to gas service must be eliminated immediately.** Effective and economical solutions are available today; political will is the only hurdle in the way of a gas-free New York.