

July 1, 2022

Comments of Urban Green Council To the New York State Climate Action Council

Re: New York State Climate Action Council Draft Scoping Plan

Uploaded electronically to https://nyserda.seamlessdocs.com/f/DraftScopingComments

Urban Green Council is an environmental nonprofit organization based in New York City working to reduce the carbon footprint of buildings. We have a 20-year track record of driving policy and moving markets with data-driven, ambitious and practical solutions for buildings.

Urban Green broadly supports the New York State Climate Action Council (CAC) strategies in the Draft Scoping Plan for decarbonizing buildings, the energy sector and the New York State economy at large.

The Climate Leadership and Community Protection Act (CLCPA) mandate to reduce carbon emissions 85 percent by 2050 is critical to a healthy, sustainable future for all New Yorkers. The majority of New York's greenhouse gas (GHG) emissions come from the building sector. The transformational policy actions recommended by the Council are crucial to reaching the State's climate targets and will collectively lower energy use, improve efficiency and drive fossil fuels out of buildings.

In particular, Urban Green strongly supports the key sector strategies detailed in the Building's chapter of the Draft Scoping Plan focused on driving zero emissions codes and standards, including adoption of:

- A highly efficient energy code that aligns with CLCPA goals by integrating GHG emissions, lifecycle cost-effectiveness and building resilience;
- All-electric codes for new construction that would prohibit fossil fuel equipment;
- Advanced efficiency standards for appliances, which <u>NYSERDA</u> estimates will save New Yorkers up to \$15 billion in utility bills over 15 years;
- A statewide energy efficiency performance standard for large buildings that aligns with New York City's Local Law 97;
- Zero emissions standards to phase out fossil fuel equipment from existing buildings; and
- Requirements for energy benchmarking and disclosure, including in listings for property sale or lease.

Urban Green Council 55 Broad Street, 9th Floor New York, NY 10004 In addition to these proposed policy mandates, Urban Green applauds the wide range of proposed actions that will provide a necessary foundation for this market shift, including:

- Addressing cost barriers with incentives, low-cost financing and electric rates that support heat pumps, storage and load flexibility;
- Mobilizing the financial industry through lender education, case studies, modeling tools and convening on how to bring capital to building decarbonization;
- Planning for a managed transition off the gas distribution system; and
- Nurturing the growing marketplace for low-carbon, efficient and electric buildings through workforce training, support for innovation and consumer education.

Urban Green is committed to equitable building decarbonization and strongly supports the Draft Scoping Plan's focus on ensuring benefits for New York's low- and moderate-income households, affordable and public housing, and disadvantaged communities. In particular, recommendations focused on financial support, energy affordability and training in disadvantaged communities are crucial for all New Yorkers to receive the health, carbon and economic benefits of this transition.

With this broad support in mind, we offer the following recommendations to strengthen the Draft Scoping Plan.

1. Develop a comprehensive transition plan to phase fossil fuel equipment out of existing buildings.

In one of its most transformative proposals, the Draft Scoping Plan recommends adoption of phased zero emission standards that prohibit the replacement of gas and oil equipment at the end of useful life starting in 2030 (low-rise residential) and 2035 (multifamily and commercial).

If adopted, these standards would send a clear market signal and aim to drive electrification in virtually every New York home and business over time. These standards would also leverage the cost-effectiveness of transitioning away from fossil fuels when building owners are already spending time and resources on an upgrade. Additional expenses are reduced to the marginal cost of an efficiency or electrification improvement rather than the entire project cost.

Urban Green strongly supports this goal, and a clear regulatory backstop is essential to transitioning buildings off fossil fuels. At the same time, a strategy focused solely on end-of-life replacements without a more comprehensive plan for support and to capitalize on other effective intervention points raises significant cost, feasibility and policy design questions.

In particular, it is crucial that the proposal fully address at least two key issues:

a) Most boilers, furnaces and water heaters are replaced on an emergency or at least urgent basis, often during cold months. Whereas a one-to-one system replacement for gas or oil systems can happen in a day or two, a heat pump retrofit could take days or weeks and should be paired with envelope and other efficiency improvements. Emergencies add extra costs, and many New Yorkers are unlikely to be logistically or financially able to make upgrades in the dead of winter or wait weeks for a retrofit. b) End-of-life prohibitions will encourage – and even provide a financial incentive for – building owners to extend the life of existing fossil fuel equipment to avoid a more time-consuming and costly change. Typically, individual components of boilers and furnaces fail. The financial incentive to replace those components rather than an entire system will increase significantly, leading to greater inefficiencies and more carbon emissions as aging equipment is pushed to its limits.

Recommendation

To ensure effective and equitable implementation of this proposal, zero emission standards must be part of a comprehensive transition plan to phase fossil fuel equipment out of existing buildings. Such a plan should include a range of policies to provide financial support, drive envelope and other energy efficiency improvements, and leverage a suite of policy intervention points to spur early electrification before equipment failure. While other proposals in the Draft Scoping Plan address some of these challenges, the plan for this transition should be strengthened commensurate with its unprecedented scale.

Key topics to address in a comprehensive transition plan to phase fossil fuel equipment out of existing buildings include:

- Clear safeguards for equity, affordability and resilience;
- An actionable plan for emergency replacements, including from flooding or winter equipment failure;
- Requirements for building-level electrification planning, such as the Electrification Retrofit Feasibility Reports included in <u>Denver's recent Ordinance</u> for building decarbonization;
- Strategies that encourage or require early electrification before equipment failure, like at time of property sale, long-term lease or refinancing, when owners can access lowest-cost capital through primary mortgages and retrofits may be less disruptive;
- Strategies that encourage or require supplemental or incremental electrification, such as requirements for space and water heating that increase over time or target specific appliances (e.g. heat pump replacements for single-family home central air conditioning);
- District-scale solutions that make use of economies of scale, whether focused on new infrastructure (e.g. district thermal networks) or geographic concentration and purchasing power (e.g. solarize campaigns); and
- Policies that target priority buildings where heat pumps are financially compelling, such as those with propane, fuel oil or electric resistance heating.

2. Ensure the statewide building performance standard is consistent with New York City's Local Law 97.

Urban Green supports the Draft Scoping Plan recommendation to develop a statewide building performance standard for large buildings. As the Draft Scoping Plan notes, New York City's large buildings are subject to Local Law 97. Many stakeholders have helped shape that evolving law. And many owners have begun planning and even executing energy efficiency and decarbonization retrofits to meet that law's requirements.

Recommendation

As the statewide standard is developed, New York State must ensure alignment between statewide efforts and the ongoing refinement and implementation of New York City's Local Law 97. Clear, consistent building performance requirements across the state will help ensure smooth uptake and successful building improvements that support the CLCPA goals.

3. Bolster workforce development with training strategies and trusted third-party organizations.

New York is on its way to unprecedented green job growth. Governor Hochul recently committed to making 2 million homes electrified or electric ready by 2030. To meet the State's 2050 goals, the Draft Scoping Plan estimates that over 250,000 housing units must annually adopt heat pumps and energy efficiency measures from 2030 onward – more than a 10-fold increase from current market activity. The commercial sector will also require similar scaling.

The Draft Scoping Plan projects that this market growth will create 100,000 new jobs by 2030 in energy-efficient construction and clean heating and cooling. Urban Green supports the Draft Scoping Plan's recommendations on workforce development and underscores that greater emphasis on training and education will help ensure this large workforce is knowledgeable on new technologies and practices.

Recommendation

Bolster the Draft Scoping Plan strategy for workforce development with the following:

- Require training for local government and code officials on building decarbonization strategies, technologies and safety issues so they are ready to meet the widespread deployment of electrified buildings;
- Add new certification requirements for decarbonization, such as mandating that at least 4 of 12 continuing education hours required annually for architects and professional engineers working on buildings be about decarbonization;
- Prioritize new training areas for (i) owners, designers, and contractors on incentives available for retrofits, and (ii) customized coaching and support for operations and maintenance teams on financing and executing retrofits;
- Improve outcomes for workers from disadvantaged communities by creating coaching and mentoring opportunities with industry professionals;
- Specify targeted programs that require building decarbonization curricula, including training and education related to construction, building design, HVAC engineering, building operations, and building trades;
- Increase access to training programs by subsidizing costs for students pursuing green certifications and for organizations that offer green certifications; and
- Reach more sectors and building types by leveraging trusted third-party training organizations, tapping their networks and providing funding to deliver new training and education.

4. Integrate electrical capacity assessments into large building energy audits to understand electrification needs.

Many buildings in New York are older and have electrical systems designed for a time before widespread cooling, refrigeration, and modern appliances. Particularly in multifamily buildings, electrification may require system upgrades to support the additional electrical demand from heat pumps, electric vehicle charging and induction stoves. New York City's Local Law 87, which mandates large building energy audits, does not currently require reporting on building electrical capacity – and it's a missed opportunity.

Capacity upgrades are expensive. Policymakers, planners and building designers have little insight into statewide building electrical capacity or the number of buildings that might need upgrades. Integrating this disclosure in energy audits would help with planning, cost estimates and alignment of state programs.

Recommendation

Ensure the statewide requirement for energy audits of large buildings includes assessment of electrical capacity by collecting information like the amperage rating of apartment circuit panels in multifamily buildings and the amperage rating of house or common area switches, neither of which pose safety risks to assessors.

5. Establish a clear directive to decarbonize New York City's district steam system.

Today, New York City's steam generating stations primarily rely on natural gas. The district steam system provides steam for heating and cooling over 1,500 very large buildings. Electrification may not be a viable or desirable option for many of these buildings.

While New York has established clear mandates to decarbonize the electricity grid, no similar targets, plans or mandates exist for the district steam system. Con Edison has recently made significant progress, publishing a <u>Long-Range Plan for steam</u> and initiating some pilot projects. But it has also <u>conceded</u> that decarbonization solutions for the district steam system are at different levels of maturity and scale, and some are currently cost-prohibitive.

Although the Draft Scoping Plan recommends new research and development to support solutions for buildings dependent on Con Edison steam, a clear regulatory signal or detailed strategy is critically missing.

Recommendation

Establish a clear directive to decarbonize New York City's district steam system, through a Public Service Commission proceeding or otherwise. Doing so will elevate this priority and help galvanize necessary investment and planning.

6. Explore additional approaches to strengthen time of property sale or lease listing requirements beyond basic energy disclosure.

Urban Green supports the Draft Scoping Plan's recommendations to require 12-month energy disclosure and an energy performance rating for single-family homes as part of sale or lease listings. These disclosure requirements will help make building energy performance more visible

and valuable in real estate transactions and spur action accordingly. The Council should consider the benefits and drawbacks of additional requirements tied to property transactions.

Recommendation

Explore additional approaches to capitalize on time of property sale or lease intervention point, like requiring a decarbonization plan, simple weatherization measures, electric readiness, or partial or full electrification as discussed above. These or other measures could help make the most of opportunities for upgrades unlocked by real estate transactions.

7. Create a dashboard to track heat pump installations statewide.

The Draft Scoping Plan projects an ambitious deployment of heat pumps across New York State, estimating 85 percent of all households will be equipped with energy efficient heat pumps by 2050. There is currently no statewide tracking of heat pump installations, in part because individual utilities administer the clean heating incentive programs supporting most if not all current heat pump deployment.

Tracking heat pump installations will enable measurement of progress toward the State goals. It will also be crucial to planning ongoing infrastructure upgrades, government actions, and utility rates and programs. Including anonymous or aggregated information on system type, capacity, costs and other relevant data will help bring transparency on the transition and move the market forward.

Recommendation

Require the creation of a unified, public dashboard that tracks heat pump installations across the state and provides relevant aggregated or anonymous data to the market. The Massachusetts Clean Energy Center offers a useful precedent, with a dashboard on the <u>Cost of Residential Air-Source Heat Pumps</u> including a detailed cost comparison tool.

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