Boston Climate Action Network
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Christopher Cook
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Dear Chief Cook,

The Boston Climate Action Network respectfully submits these comments and recommendations on greenhouse gas (GHG) emissions performance standards for existing large buildings, being developed by your office pursuant to Boston's Climate Action Plan (CAP) and the Mayor's commitment to achieving a carbon neutral Boston by 2050.

At the outset, we want to express our full support for the establishment of mandatory emissions performance standards. The climate crisis requires that we as a society undertake all feasible measures to reduce GHG emissions from our activities as soon as possible. Boston's buildings account for the large majority of the city's GHG emissions, and 85 percent of projected building square footage in Boston in 2050 exists today. It is therefore essential that a strong program be developed and implemented to decarbonize Boston's existing buildings. A successful building decarbonization program will help mitigate the impacts of global climate change, create jobs in the local economy, significantly reduce utility bills for residents and businesses, and improve public health.

We understand that the City intends to develop mandatory carbon emissions performance standards for existing buildings, consisting of emissions targets for different categories of buildings. These emissions targets will be phased in over time and become increasingly stringent, so that existing buildings achieve net zero emissions by 2050. These features are essential, and we fully support them. We ask that you also consider the following comments and recommendations.

1. Follow the Science

Performance standards must be set at levels consistent with what science demands, and target deadlines should ensure that carbon neutrality is in fact met by 2050. To this end, the City should include interim carbon reduction targets that are consistent with its goal, as stated in *Imagine Boston 2030*, of reducing carbon emissions 50% by 2030.

2. Include More Buildings

The building size threshold for triggering the performance standards, as well as the reporting and disclosure requirements, should be lowered to 20,000 square feet. These additional

buildings, and all smaller buildings as well, must be addressed in order to meet the goal of carbon neutrality. It is better to begin sooner rather than later. Additionally, the size threshold for including new projects under the proposed Zero Net Carbon zoning requirement should be set no higher than the threshold for inclusion under the performance standards. Otherwise, the City will allow the construction of new buildings that will require retrofits later.

3. Mandate Initial Audits

All covered buildings should be required to conduct an energy audit or assessment. Such an audit should be performed within one year after the new performance standards take effect, unless an acceptable audit has already been done within the last four years. The energy audit will be the foundation for the retrofit work needed to meet the performance standard and will be critical for the owner's planning. Section 1.09 of the current BERDO regulation can serve as a template for specifying the standards under which the audit needs to be performed, as well as the reporting requirements. In particular, a list of energy saving measures with payback within ten years, as specified by section 1.09 (c) 5, will provide valuable information for the owner and the City alike, as to what energy and thus emissions savings to expect. Having this information is expected to encourage owners to take cost-saving energy efficiency measures first, before considering purchases of RECs or offsets.

As a part of the required energy audit, we recommend that each covered building be evaluated for the feasibility of installing on-site renewable energy generation, solar in particular. According to BERDO data from 2017–2019, only 13 to 15 buildings report on-site generation, with a production of merely 1.3–1.7 mWh. We believe this low usage represents a missed opportunity.

4. Limit RECs and Offsets

The emissions performance standards should include provisions that prevent excessive use of renewable energy credits (RECs) and purchased greenhouse gas offsets. It is unlikely that the regional energy grid will ever be able to supply a limitless amount of clean electricity. Therefore, it is essential that energy efficiency measures be the first priority in carbon reduction measures. To prevent RECs and offsets from being abused, the City should ensure that they are used only after application of all feasible energy efficiency measures. The City could require that, for each building group, a specific energy use intensity (EUI) be achieved before RECs and/or offsets are permitted. Alternatively, the City could limit the use of RECs and offsets to a certain percentage of the emissions limit.

As an accounting practice, emissions from RECs, carbon offsets, or direct power purchase agreements should be reported as deductions from the actual emissions produced. The actual emissions should be calculated based on the locally applicable greenhouse gas coefficients and should be reported before such deductions, which currently does not seem to be the case. This measure would assure transparency in the application of RECs and facilitate accounting for emissions as they pertain to the City's greenhouse gas inventory.

5. Demonstrate Additionality

Methods of acquiring clean energy should demonstrate additionality and local sourcing. Additionality means stimulating the creation of new green power projects, hopefully replacing fossil fuel-based ones. Local sourcing keeps that growth, with the attending benefits of job creation and improved public health, within our own region. For these reasons, Class I RECs should be the only RECs allowed for purposes of meeting performance standards. Emissions saving from direct power purchase agreements should only be allowed as emissions deductions if the source of the power resides in the ISO-NE region.

6. Beware "Flexibility"

We understand that the City is considering options to provide building owners with additional flexibility in meeting performance standards. One such option that we do support is a portfolio approach to GHG reduction. Allowing owners of multiple buildings to focus their efforts on upgrades with the largest carbon ROI will make it easier for the city as a whole to reach the near-term carbon reduction needed. We are, however, cognizant of the potential for administrative challenges this approach may entail. Additionally, we urge substantial caution around other tools for flexibility, which may be abused and/or make effective enforcement impossible.

We suggest the following conditions for a successful portfolio option:

- The owner should be required to complete energy audits for all buildings entering the portfolio pathway and pay a fee that approximately covers the costs to the City of administering the program (including enforcement costs).
- The owner should be required to develop and submit for approval a plan and schedule that covers all their buildings, is certified by a professional, includes emissions targets and compliance dates for both the individual buildings and the portfolio of buildings, includes interim dates that will ensure progress, includes annual progress reports, and ensures that the requirements of the plan and schedule are binding on any subsequent owner of any building.
- Enforcement could be facilitated by provisions requiring that, as a condition for opting into the portfolio pathway, the owner shall commit up front to making alternative compliance payments and/or penalties in the event of noncompliance with any of the elements of the plan.

7. Utilize Strong Fines and ACPs

With regard to enforcement, we support the concept of a dual strategy of civil fines and alternative compliance payments. In the case of fines, we believe the amount of the fine should be sufficiently high to remove any incentive to not comply with the performance standard. We suggest that the existing BERDO penalty language at section 7-2.2(j)(4) be

amended to (a) remove the $3,000 per year penalty limit, (b) increase the penalties for failure to report and (c) add new and higher penalties for violations of the performance standards.

Alternative compliance payments (ACPs) may be a very useful tool and should be available for the full range of noncompliance situations, at the discretion of the Air Pollution Control Commission.[1] We believe the proposed ACP structure, whereby payments are scaled to the cost of GHG reduction upgrades less any government or utility incentives, is a good one. ACPs should be designed both to eliminate any financial incentives for noncompliance and to achieve compensatory emissions reductions at least equivalent to those avoided by the violator. Collection efforts would be facilitated if unpaid assessments resulted in the imposition of a lien on the property, similar to unpaid property taxes and other unpaid obligations. See Mass. Gen. Laws ch. 40, § 58. All monies collected under the alternative compliance payment program should be devoted exclusively to building emissions reduction efforts within the city. We recommend that such monies not be used for emissions reductions at municipal buildings, but instead be used to subsidize or fund emissions reduction measures or programs for privately owned buildings, particularly those in economically disadvantaged neighborhoods.

8. Invest in Building Owner and Staff Education

Much of the success of the new ordinance will be determined by the degree of compliance and buy-in among those responsible for covered buildings, including owners, managers, building operators, and maintenance staff. Yet many may lack the necessary knowledge to implement and maintain the considerable technical upgrades required to decarbonize their buildings. We are pleased that the City has launched the Building Energy Retrofit Resource Hub to provide assistance to stakeholders in making building energy improvements. In addition, the City should provide free education and training opportunities in modern building technologies, in particular to those lacking resources to pay for comparable services (see New York Administrative Code $28-320.4 and $28-320.5 as an example).

9. Require Reporting Certification

We propose that the City require building owners to file a separate annual report, stating either that a building is in compliance with the applicable building emissions limit, or that it is not, and if it is not, stating the amount by which the building exceeds its limit. This report would be in addition to the annual reporting of energy and emissions data, and it should

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[1] ACPs could be particularly useful if enforcement under Mass. Gen. L. ch. 40, § 21D proves problematic. Section 21D includes provisions that allow a violator to dispose of a case brought pursuant to its provisions by paying an amount "not exceeding three hundred dollars." Depending on how this language is interpreted and applied, this statutory remedy could be inadequate to deter noncompliance.

be certified by a registered design professional, as for example required by New York Administrative Code § 28-320.3.7. Such a measure would significantly reduce reporting error and facilitate enforcement. It should not, however, replace the more robust data quality control procedures that BCAN has previously recommended that the City establish.

10. Enhance Public Disclosure

Data reported by property owners should be disclosed to the public in a manner that is useful and convenient. Besides the administration of performance standards, there are many public purposes that can be served by building energy and emissions data. These include enabling owners to compare the efficiency of their buildings to others in the same category, informing building purchase and rental decisions on the part of individuals and businesses, and supporting research in related fields of inquiry. While we could suggest various ways to improve ease of use, we consider the following to be the most important:

- The City should disclose the name of the owner of every included building. This is publicly available information, but is currently very cumbersome to obtain.
- We recommend the development of a "score card" or "energy sticker" for each building. It should at a minimum feature the property's owner name and address, the building's EUI (a key measure of energy efficiency), the EUI rank of the building among those in the same category, the median EUI of the category, and the building's expected utility costs.
- We suggest improvements to the current web-based map and data analytics tool (http://boston.maps.arcgis.com/apps/webappviewer/index.html?id=b3ea9b33314541c6a2663732698fd92a) to increase functionality, in particular monitoring energy use and emissions over time and ease of use. Examples of good websites are those of New York City (https://metered.urbangreencouncil.org/) and Seattle (http://www.seattle.gov/energybenchmarkingmap/#seattle/2018).

Thank you for your consideration.

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On behalf of the Boston Climate Action Network

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