



*American Council of Engineering Companies of New York*

**Comments to the NYC Department of City Planning  
Re: “City of Carbon Neutrality” Text Amendment  
July 26, 2023**

**About ACEC New York:** The American Council of Engineering Companies of New York (ACEC New York) is an association representing nearly 300 engineering and affiliate firms with 30,000 employees across New York, with a concentrated presence in New York City. Founded in 1921, our association is one of the oldest continuing organizations of professional consulting engineers in the United States. Our members are the Professional Engineers who design the mechanical, electrical, energy performance, structural, plumbing, civil, environmental, fire protection and technology systems for buildings and infrastructure across New York.

ACEC New York members have a proud history of providing technical expertise to city agencies and officials as needed to update, advance, and amend laws and codes to address modern needs. For example, during the city’s last comprehensive Construction Code revision cycle (2017 – 2021), over 100 of our members contributed significant work by volunteering serving on NYC DOB’s Technical Committees to update the code.

**Comments:** ACEC New York supports the proposed zoning text amendment. Years ago, our association adopted the principle that New York City should strive to be a leader in sustainability, green building, energy efficiency and carbon emissions reduction. We support this initiative to update city regulations to better accommodate technologies that will help advance these goals.

Our association’s Energy Code Committee, comprised of Professional Engineers with expertise in building energy performance, reviewed the proposal and offers the following comments to strengthen this measure’s impact:

- The proposed amendment increases the allowable roof area that mechanical equipment can cover as a permitted obstruction to 50% of the roof area. In our experience, this could be insufficient for certain buildings. The amount of roof space needed for electrified heating and cooling equipment is dependent on the ratio between conditioned floor area and roof area. For example, for a 50-story building the amount of mechanical equipment on the roof would be double that of a 10-story building with the same footprint. Depending on the types of systems being used, the type of occupancy, any existing mechanical equipment and the building massing, the amount of mechanical equipment can cover a significant portion of the roof in a fully electrified building. The proposed amendment also includes solar panels as a permitted obstruction for 100% of the roof, we would recommend the same for mechanical equipment.
- In addition, the amendment indicates that all mechanical equipment be subject to screening. This requirement may inhibit the placement of rooftop equipment in the most efficient manner and further exacerbate the issue with the limits to roof area coverage. If equipment is required to be screened, it will tend to be consolidated in central areas of the roof to optimize the screening. This may move the mechanical equipment further from its end use, increasing ductwork and piping distribution. Increased ductwork and piping will lead to increased heat loss, higher refrigerant charges and increased embodied energy in the materials, thus reducing the overall efficiency of the systems.