

June 27, 2022

American Institute of Architects New York Testimony to the Committee on Housing and Buildings, Committee on Environmental Protection and Committee on Civil Service and Labor

Thank you, Chair Sanchez, Chair Gennaro, and Chair De La Rosa for holding this hearing today and the opportunity to testify. The American Institute of Architects New York, also known as AIA New York, is the professional association representing nearly 6,000 of New York City's architects and related professionals.

Since our founding in 1857, AIA New York and our members have worked to advance the quality of life of New Yorkers and protect the public's health, safety, and welfare. Working alongside our partners in City government, AIA New York has and will continue to be a strong supporter of Local Law 97 (LL97).

As you know, buildings contribute two-thirds of the city's total greenhouse gas emissions. LL97 is the centerpiece of the city's climate strategy for large buildings and is crucial to delivering NYC's low-carbon future. The law will also bring important co-benefits, like lower pollution and greater health and comfort to New Yorkers across the five boroughs. Among the weak spots in this endeavor is a workforce capable of delivering high performance buildings and electrifying everything possible. It is our belief that, at all levels, we do not yet have the necessary workforce to comply with LL97.

We have the means for building zero emissions, high performance buildings today. These are market ready solutions, and more and more products are coming into the market. These are buildings that will be easier and simpler to operate, and more durable buildings that require far fewer inputs. High performance buildings are conservative in nature - they cost less to operate with little or no cost premium to construct buildings to comply with the 2050 requirements of LL97.

At best, the vast majority of our new buildings are barely complying with the status quo (compliance with the energy code) let alone meeting the demands of 2030 and 2050. Each building built or renovated that doesn't meet the 2050 requirements is a lost opportunity. We know it can be done. We have colleagues who are building buildings today that meet the 2050 goals of LL97.

We find there is a major discrepancy in the marketplace demand for workers and the projected supply of workers estimated to meet the goals of LL97 and the New York State's Climate Leadership and Community Protection Act. Not only is it an issue of the quantity of workers, but also of the quality of their training.

On the demand side, our members report that most clients are not requesting performance higher than required by the building code for renovations or new construction. This will not get to 2030 emissions levels, let alone 2050. Local law 154 of 2021, the all-electric buildings law, helps but doesn't address decarbonizing existing buildings. All this puts the onus of decarbonization on the grid rather than assisting with lowering loads through higher efficiency, and decarbonizing the grid alone is not sufficient to meet carbon targets. We will not get a second chance.

On the supply side, the entire building ecosystem will need training and preparation that we suggest be done in phases, and that supports the growth of the nascent high performance retrofit industry in NYC: Owners, developers, building managers, contractors, leadership in architecture and engineering firms, policymakers and lenders – these are the makers of demand and we need them trained first to get retrofit projects in the pipeline. The generated projects will then induce a demand for training of the next level of workers, these including professionals such as architects, engineers, façade designers, energy analysis and scientists, regulators such as the Department of Buildings and their examiners and inspectors, members of the construction trades,

construction managers, electricians, and HVAC mechanics, as well as certification professionals (PHIUS, PHI, HERS, etc.).

In technical education, we have levels of competency: awareness, understanding, and ability. We need to extend this to the different sectors. The general public needs an awareness of how buildings operate and how to transition to a fossil fuel free future. The average American spends 90% of their time indoors. They should have an understanding of how comfort is obtained and where electricity comes from. Leadership in the building sector should have an understanding of what is required for high performance buildings to meet LL97 and 80x50. Most still do not understand that a passive house quality enclosure is - the first step for getting nearly every building type in NYC on its way to meeting 80x50. Specific ability to realize high performance buildings is eventually needed in all trades and professions.

The specific ability training we recommend is Passive House. Our members who have been trained in this standard all attest to how much it has fundamentally changed their practice. It is a data-driven and scientific approach to high-performance building design; it is holistic and comprehensive. This training has been extensively subsidized by NYSERDA, training hundreds of design professionals and hundreds more tradespersons. Please note that NYSERDA subsidized these trainings without a clear market demand for these skills.

We would even invite the members of these committees to undertake such a course. We are confident that this level of understanding will help produce more productive policy decisions.

Again, thank you to for holding this important hearing. Our organization and members remain committed to working with the Council and Administration to deliver NYC's low-carbon future.