

**MANHATTAN BOROUGH BOARD
RESOLUTION**

IN SUPPORT OF THE INTERNATIONAL PASSIVE HOUSE STANDARD FOR NEW YORK CITY

WHEREAS, buildings are a major source of greenhouse gasses, accounting for 39% of CO₂ emissions and consuming 70% of the electrical load in the U.S., according to the U.S. Green Building Council (USGBC); and

WHEREAS, the energy used in New York City buildings contributes nearly three-quarters of citywide emissions, according to *One City: Built to Last*, and that to successfully reduce the threat of climate change, the CO₂ emissions of our buildings need to be dramatically cut back while maintaining and improving the services they provide; and

WHEREAS, the Passive House (PH) Standard is a recognized worldwide standard for energy-saving buildings of all types, which reduces heating and cooling energy requirements by 90% and overall energy demand by up to 75% compared to conventional buildings while also providing the most comfortable and healthy inside environment; and

WHEREAS, energy inefficient buildings in Manhattan have resulted in costly tenant utility bills, contributing to housing unaffordability; and

WHEREAS, the effectiveness of the PH Standard has been illustrated by tens of thousands of Passive Houses in the world, from Shanghai, China, to New York City; and

WHEREAS, Brussels, Belgium adopted its 2015 building regulations based on the PH Standard and is a core component of the European Union's planned mandate of "nearly zero energy" buildings by 2020. A growing number of cities in the U.S., from San Francisco to Philadelphia, officially acknowledge the PH Standard as part of their efforts to promote sustainability; and

WHEREAS, Passive House is directly focused on reducing energy needs through the application of building physics, high quality construction and proven construction technologies including insulation, airtightness, heat recovery, solar energy, solar shading, and incidental internal heat gains. Resulting reductions in building energy requirements can enable renewable sources to meet 100% of energy needs ("Net Zero" performance) or to supply surplus energy to the utility grid ("Net Positive" performance); and

WHEREAS, New York City is an environmental thought leader and standard setter. The City Council unanimously approved a plan to reduce greenhouse gas emissions by 80% by 2050. Mayor Bill de Blasio issued the policy, *One City Built to Last: Transforming New York City's Buildings for a Low Carbon Future* (2014), which recognizes the PH Standard and serves as an affordability, economic development, and public health plan. Further, former Mayor Michael R. Bloomberg published *PlaNYC: A Stronger, More Resilient New York*, a long-term sustainability plan in 2013 that the de Blasio administration revised in 2015 with the release of *One New York: The Plan for a Strong and Just City*; and

WHEREAS, New York City is one of the world's leaders in real estate development, architecture and engineering firms, skilled labor unions, financial institutions, and research universities and therefore is uniquely poised to develop the solutions needed to transform our city and share these solutions with the world; and

WHEREAS, New York City has exceptional potential as an economic engine for sustainability in the U.S. and the world. The integrated urban lifestyle of the city results in a low carbon footprint, ranking NYC's carbon profile as the 4th lowest in the nation. Passive House innovations can help solidify and extend sustainability leadership efforts; and

WHEREAS, New York Passive House (NYPH) is an established local resource of Passive House expertise. NYPH works with other local low-energy and sustainability stakeholders, and is in continual collaboration with the Passive House Institute (PHI), for the development and transfer of engineering and environmental technologies. PHI is an independent scientific institute in Darmstadt, Germany, that is responsible for developing the PH Standard and the evolving scientific research that underpins its worldwide implementation; and

WHEREAS, cost is a major consideration in construction projects and it is essential that all publicly supported PH undertakings be focused on reaching cost parity with conventional construction; and

WHEREAS, PH cost parity has been accomplished on projects in Europe, in the U.S. and New York City and, with the collaboration of global PHI and NYC planning and policy expertise, it would be possible to undertake an initiative of Passive House construction best practices with a goal of achieving cost parity in local demonstration projects; and

WHEREAS, New York City has in the range of 69,000 existing buildings according to the Department of Finance in 2007 and renovating our existing building stock to an energy efficient standard is critical to meeting carbon reduction goals and an incremental renovation plan is needed; and

WHEREAS, Passive House Standard can be applied to both new construction and renovations, with the majority of Passive House projects completed to date in New York City being renovations; and

WHEREAS, the performance standard for renovating existing buildings is slightly more lenient but still results in a roughly 90% reduction in average heating and cooling energy usage and up to a 75% reduction in primary energy usage, according to *One City Build to Last*; and

WHEREAS, maximizing energy efficiency in residential buildings would reduce tenant utility costs and improve overall housing affordability; and

WHEREAS, Passive House could facilitate community storm resilience under the coldest and hottest weather conditions, the importance of which is described in New York City's Building Resiliency Task Force (BRTF) Report, issued in response to Hurricane Sandy, as Proposal #27 Maintain Habitable Temperatures Without Power; and

WHEREAS, New York City is committed to reducing its Greenhouse Gas (GHG)

Emissions by 80% by 2050—the level that the United Nations projects is needed to avoid the most dangerous impacts of climate change—and will chart a long-term course for a total transition away from fossil fuels to renewable sources of energy; and

WHEREAS, in New York City, our buildings are responsible for the overwhelming share of our GHG emissions, accounting for nearly three-quarters of our contribution to climate change, according to *One City Build to Last*; and

WHEREAS, President Barack Obama announced new actions to bring renewable energy and energy efficiency to households across the country, and New York State Homes and Community Renewal (HCR) intends to work closely with NYSERDA to monitor the ongoing energy use intensity of any Passive House projects that may be selected for funding in order to provide valuable data to the market to accelerate the trend toward construction of Passive-House-certified affordable multifamily buildings; and

WHEREAS, on Roosevelt Island, Cornell Tech has started work on a 26-story dormitory building which will be the tallest and largest Passive-House high-rise in the world when it is completed in 2017; and

THEREFORE, BE IT RESOLVED THAT the Manhattan Borough Board supports the investigation of the implementation of the Passive House Classic, Passive House Plus (net zero) and Passive House Premium (net positive) Standards for potential application to new construction and renovation in our community; and

BE IT FURTHER RESOLVED THAT the Manhattan Borough Board encourages the completion of a public project in Manhattan to demonstrate a zero-net energy standard and cost saving potentials; and

BE IT FURTHER RESOLVED THAT the Manhattan Borough Board supports working towards the adoption of a zero net energy standard, such as the Passive House Standard, into the New York City building code by adjusting existing regulations to accommodate differences in methodology and performance; and

BE IT FURTHER RESOLVED THAT the Manhattan Borough Board urges New York City administration to leverage its eco-leadership in construction, finance, and innovation with an integrated promotional and green awareness campaign to gain support from government agencies and officials, developers, contractors, unions, real estate, buyers, and the public and to normalize a zero net energy standard and the use of renewable energy in our city and across our country.

Adopted by the Manhattan Borough Board on the 21st day of April 2016



Gale A. Brewer
Manhattan Borough President
Chair of the Manhattan Borough Board