



AIA
New York
Planning and Urban
Design Committee



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Committee on
the Environment

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Net Zero Neighborhoods for NYC

New York City is confronting the challenges and opportunities of achieving net zero carbon footprint at a district scale in New York City. This goal refers to achieving net zero carbon emissions by balancing a measured amount of carbon (or CO₂ equivalency) released with an equivalent amount sequestered or offset. The Net Zero Neighborhoods project is led by the American Institute of Architects New York Chapter (AIANY) comprising interdisciplinary experts and stakeholders through the AIANY Planning & Urban Design Committee (P&UD) and the Committee on the Environment (COTE) with Gowanus by Design as key community stakeholder group. The intent of this effort is to support existing policy benchmarks such as New York City's ambitious 80 x 50 plan, the reduction of greenhouse gas (GHG) emissions by at least 80 percent by 2050, and OneNYC's zero waste to landfills by year 2030 by defining the scope of such efforts at the urban district scale. It aligns with NYC GHG Inventory Report Emission framework of the Greenhouse Gas Protocol's Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC). By tapping into and supporting these existing efforts, the interdisciplinary community of emerging experts leading this effort provide a platform for innovative thought leadership, knowledge sharing and advocacy towards solutions for sustainable urbanism.

Undertaken as a capacity-building exercise in a regulatory environment where policy makers, technical and community experts benefit from applying this district-scale expertise, Net Zero Neighborhoods is convening invited stakeholders and interdisciplinary members of the design and planning community to consider the challenges posed by district-scale sustainability. The initiative is primed to engage engineering and architecture professionals, as well as urban designers, planners, researchers and institutions in dialogue with key stakeholders, community organizations, and city regulatory agencies to develop frameworks for solutions that achieve net-carbon neutrality. Through focused study of two New York City districts, the project has identified a need to bridge the broad scope of city-scale sustainability frameworks and the more narrow-scale scope of building-specific metrics with a set of integrated built environment connections that translate into low carbon planning tools for the urban district scale.

Gowanus, Brooklyn and Governors Island, Manhattan have been identified as prime sites for an initial carbon neutral district case study. In contrast to the clarity of jurisdiction and boundary that Governors Island provides, Gowanus, Brooklyn was identified for its complexity and inherent challenges in defining the methodology for benchmarking. Both areas are engaged in New York City's planning and rezoning process, and consideration of these two cases provides a diverse set of conditions and opportunities to innovate within the scope of the project. Assessment and comparison of the two cases will serve as means to exploring the ways in which emissions reduction and offset strategies may differ based on factors, such as: phasing and strategy for local development, ownership and governance structures, and composition of infrastructure. Net Zero Neighborhoods intends to set up a replicable planning process to model net-zero districts in New York City.

Jeffrey Raven, FAIA, LEED AP BD+C
Co-Chair, Planning and Urban Design Committee
RAVEN A+U / New York Institute of Technology
Graduate Program in Urban + Regional Design
jeffrey@jeffraven.com

Anne Shellum, LFA
Co-Chair, Committee on the Environment
Mechanical Engineer
Buro Happold Engineering | Building Services
Anne.Shellum@BuroHappold.com