

# Passive House as a Roadmap for Low-Carbon Affordable Housing

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## ABSTRACT

Durability, indoor air quality, comfort, energy reduction, and affordability are all major factors for housing of the future. Lowering carbon emissions is becoming a greater part of housing policy in both affordable housing, and in local codes and zoning. Home buyers and renters are also more conscious than ever about the air quality of their homes. Passive House is able to offer a differentiation of housing types in a simple and straightforward way. Specifically by using case studies of low carbon projects throughout New York and the surrounding region, will show how the concepts of Passive House are able to be incorporated into different housing types. Of particular focus are the Buildings of Excellence projects in Upstate New York which are all using Passive House principles, and many times full PHIUS Certification to guide decision making. We will review the evolution of these projects, how Passive House was integrated to reduce emissions. We will highlight projects such as Creekview Apartments in Canandaigua, which was the first PHIUS Certified affordable housing complex in Upstate New York who is taking their concept further to full net-zero energy using geothermal and renewable energy systems.

## BIOGRAPHY

James has been a practicing green building consultant for 10 years. James consults with architects and developers on energy efficient design strategies and performs verification of green building and energy efficiency programs with an emphasis on low carbon projects in affordable housing.

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