netZero Village Pioneers Energy Efficiency in Multifamily Development



New York's first net zero energy multifamily development.

Building netZero Village combines developer David Bruns' three passions: engineering, energy efficiency, and residential real estate. Realizing that buildings consume 40 percent of U.S. energy, Bruns decided to "change the way developers look at energy efficiency by proving that a net zero energy development could be commercially viable in the extreme weather of the Northeast."

"This is the first net zero multifamily development in New York State," said Bruns, owner of the Bruns Realty Group of Schenectady, and a man on a mission.

netZero Village comprises a six-building first phase of 72 units and a second phase of seven buildings with 84 units. Bruns recognized that the math of achieving net zero energy was both simple and challenging, and that technical support was crucial.

"NYSERDA has been a really great champion of this project and has guided us through the design process," Bruns explained. He lauded the organization's technical expertise and guidance.

Energy efficient design

The design of the buildings is based on Passive House design concepts, using careful analysis to predict the energy consumption of all buildings comprising netZero Village. Bruns then determined the supply side. "We matched the energy consumption with renewable sources — both solar electric systems and solar hot water systems," he explained. The object of these calculations was to achieve the long-term equilibrium between energy demand and supply that constitutes zero net energy performance, in which the renewable energy production offsets the energy consumed by the buildings.

Get started

Visit **nyserda.ny.gov/Irnc** or call **1-866-NYSERDA** to learn how you can reduce your energy consumption and costs.

Situation

Change the way developers look at energy efficiency

Solutions

- High-performance windows
 and doors
- Insulated walls
- Heat recovery ventilation systems
- LED lighting
- Use of reinforcement strategies to affect tenant behavior

Benefits

- ENERGY STAR[®] Certified Homes are distinctive
- Healthy homes
- Reduced energy costs compared to conventionally built homes

"NYSERDA's assistance was just very, very vital. Basically, the project wouldn't have happened without their help."

> – David Bruns, Developer Bruns Realty Group

