PS 62: NYC’s NET ZERO ENERGY PUBLIC SCHOOL
Staten Island, NY
Elementary School (Pre-K through 5th Grade)
68,000 SF
2 Stories

PS62: THE NET ZERO ENERGY SCHOOL
SKIDMORE, OWINGS & MERRILL LLP

PROJECT BACKGROUND

NYC School Construction Authority

PS62 – Pilot Project

NYC School Design Standards
PROJECT IMPACT

NYC School Construction Authority

- 1,600 Schools
- 130 Million SF
- 1.1 Million Students
- 37% of NYC municipal greenhouse gas emissions

PS62: THE NET ZERO ENERGY SCHOOL

NYC Public Schools

COMPARATIVE ENERGY USE

TYPICAL SCA SCHOOL
(Complies w/ NYC Local Law 86; +/-30% beyond ASHRAE 90.1)

PS 62
(50.4% beyond typical SCA School)

NYC Local Law 31
DESIGN TEAM STRATEGIES:

- MAXIMIZE ENERGY SAVINGS THROUGH PASSIVE MEANS
- USE EFFICIENT & COST-EFFECTIVE ACTIVE SYSTEMS
- ENGAGE OCCUPANTS TO INFLUENCE BEHAVIOR
CROSS SECTION

ENERGY USE COMPARISON

Typical SCA School
(Total Energy Use)

PS-62
(Total Energy Use)

Plug Load: Any energy load that is plugged into a receptacle (i.e., not hardwired into the building)
USER WORKSHOPS

Collaborative bi-weekly workshops focused on ideas for minimizing the building's energy consumption.

BUILDING DASHBOARDS
CORRIDOR

CLASSROOM
VIEW FROM NORTHEAST

ENERGY MODELING
OPERATIONAL PERFORMANCE

% Delta (Modeled vs. Actual) Electric Consumption

Before Partial Commissioning
After Partial Commissioning
Outcome…

• NYC Municipal Preparation for Local law 31
• Adoption of standard LED lighting across all SCA Schools
• Adoption of Upgraded Kitchen equipment
  (estimated 25% of energy use across all public schools)
• Enhanced Kitchen Exhaust and Ventilation
• Enhanced Daylighting Requirements

…A more sustainable city