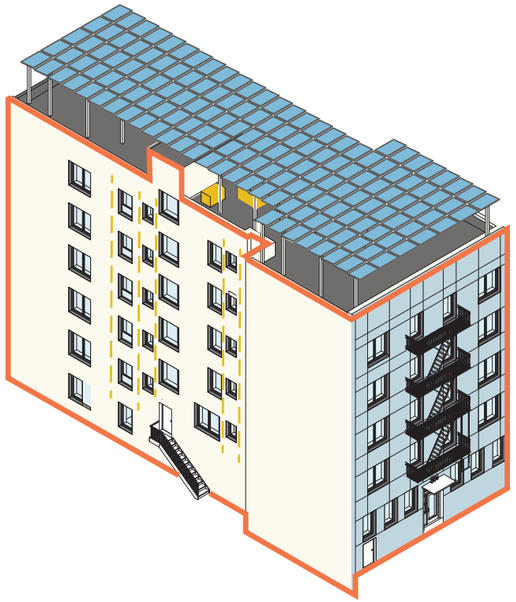
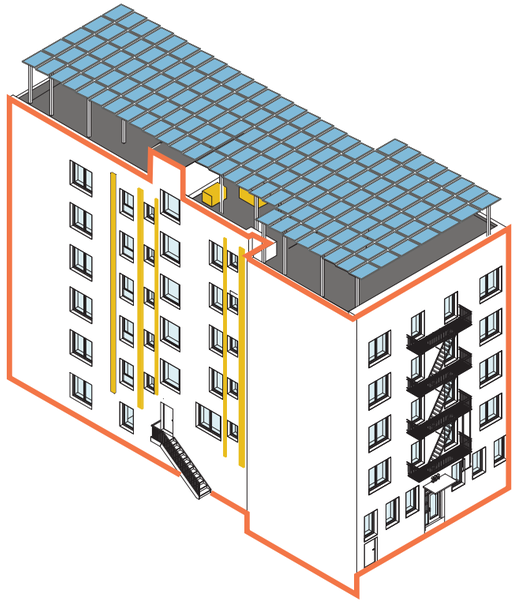
NYSERDA RetrofitNY Study

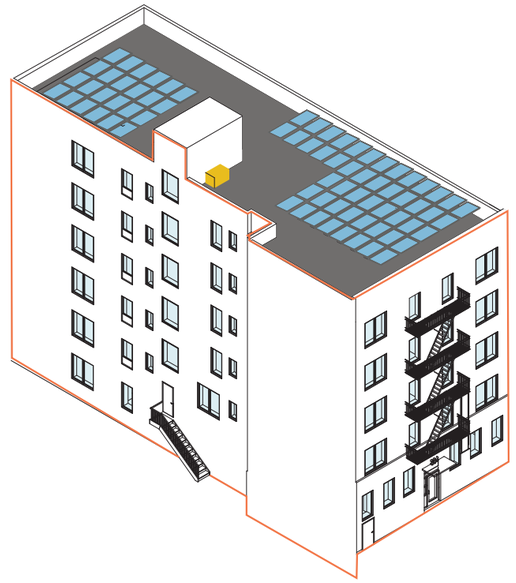
Efficiency Options:
Volmar Project



1 **Most Efficient**
Approaching Net Zero (EUI: 24.6, with solar: 15.4)



2 **NYSERDA RetrofitNY Proposal**
Approaching Net Zero (EUI: 29.6, with solar: 20.4)



3 **Final Plan for Development**
(EUI: 69.6, with solar: 65.3)

		1	2	3
Building Envelope	Street Facade	Insulated panelized cladding system	Existing uninsulated brick walls	Existing uninsulated brick walls
	Sides and rear	Stone wool 6” EIFS	Existing uninsulated brick walls	Existing uninsulated brick walls
	Roof	R-30 Blown cellulose + R-16 Rigid insulation	R-30 Blown cellulose + R-16 Rigid insulation	R-30 Blown cellulose + R-16 Rigid insulation
	Air Tightness	2.33 ACH50	2.33 ACH50	5.12 ACH50
	Windows	Tilt & Turn Double glazed U-0.277 - SHGC 0.4	Tilt & Turn Double glazed U-0.277 - SHGC 0.4	Tilt & Turn Double glazed U-0.277 - SHGC 0.4 (AC panels)
Building Systems	Heating & Cooling	VRF	VRF	New steam boiler & Existing window ACs
	Ventilation	Central ERV with exterior risers (underneath insulation)	Central ERV with exterior risers	Natural ventilation
	DHW	Heat pump water heater	Heat pump water heater	Heat pump water heater
	Solar Array	Pergola 42 kW	Pergola 42 kW	Roof mounted 19.76 kW
	Lighting	LEDs + Daylight and occupancy sensors in common areas	LEDs + Daylight and occupancy sensors in common areas	LEDs + Daylight and occupancy sensors in common areas
	Stoves	Standard Electric	Standard Electric	Existing Gas
	Refrigerators	Energy Star	Existing	Existing