

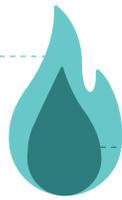
Improve Comfort and Energy Efficiency

85% NYCHA apartments built before 1980



15% Built after 1980 when the first energy code was developed

40% more energy used by NYCHA units



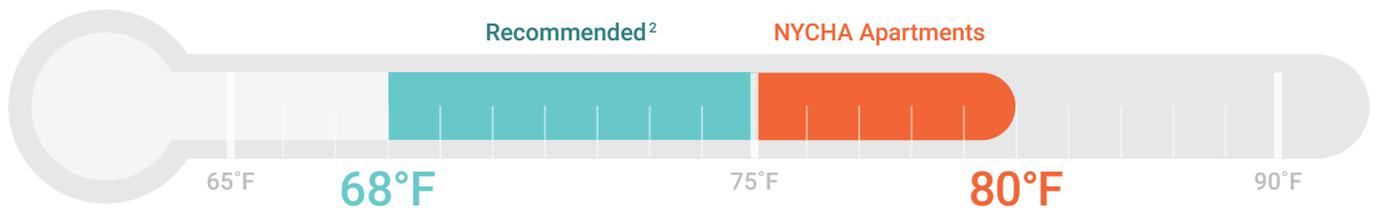
120 kBtu/sf New York City's average energy use for multi-family buildings¹

92% of apartments are heated with steam, the most inefficient way to heat buildings.

1,379 boilers provide NYCHA's heat. Each has a life expectancy of 30 years. 45% are already 25+ years old.

Apartments are overheated because outdoor temperature sensors can't tell when it's hot inside—only that it's cold outside.

Winter-time indoor temperature



 That's like keeping the lights on inside because it's dark outside—even when you're sleeping or not home.

NYCHA will Upgrade Heating, Hot Water and Lighting

\$300 Million Investment to retrofit master planned developments

\$30 Million Investment to retrofit 5,000 apartments in small buildings

Eliminate unplanned heat and hot water outages



Regularly test and adjust settings

of boilers, hot water heaters, ventilation and lighting to optimize performance



Eliminate overheating by installing control systems in

8 developments by 2016

230 developments by 2025



Meet the Challenge of Climate Change

90°F days per year in New York City¹

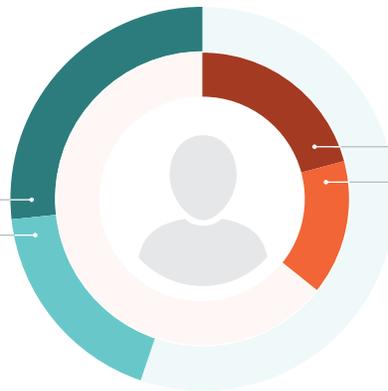


54,000 NYCHA residents are located in areas **subject to coastal flooding**

1 in 6 NYCHA buildings lost power during Superstorm Sandy

44% of NYCHA residents are children and seniors

<18 years old (27%)
65+ years old (17%)



vs. New York City's population

(21%) <18 years old
(15%) 65+ years old

NYCHA also has almost **2x** more residents <65 years old with disability than the New York City average

NYCHA will Mitigate its Impact and Adapt to Climate Change



Contribute to the City's goal of reducing greenhouse gas emissions by 80% by 2050. **NYCHA will reduce its energy use by 20% in 10 years.**

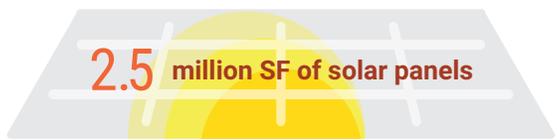
That's like **removing 52,000 cars** from the road.



Developments that are subject to flooding will receive **resiliency retrofit plans** and community emergency preparedness.



33 Sandy-impacted developments will receive back-up power



will provide

25 MW of solar energy in 10 years

Manage stormwater through **green infrastructure (GI)**

By 2018: GI projects at **6 developments**
28 million gallons of water captured annually

30+ additional projects to come

