



**NYC**™ **Retrofit**  
**ACCELERATOR**

MAKING ENERGY EFFICIENCY EASIER

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**[nyc.gov/RetrofitAccelerator](http://nyc.gov/RetrofitAccelerator)**





**Free, personalized advisory services** to streamline the process of making energy efficiency improvements.

The NYC Retrofit Accelerator is part of the City's commitment to reduce GHG emissions by 80% by 2050 (80 x 50).



# 90%

of NYC buildings  
will still be here  
in 2050.



Nearly

# 70%

of our GHG  
emissions come  
from buildings.







- Increase demand for efficiency upgrades
- Unique insights into building needs
- Trusted advisor to buildings
- Complement market resources



# Free Help. Simple Fixes. Big Results.

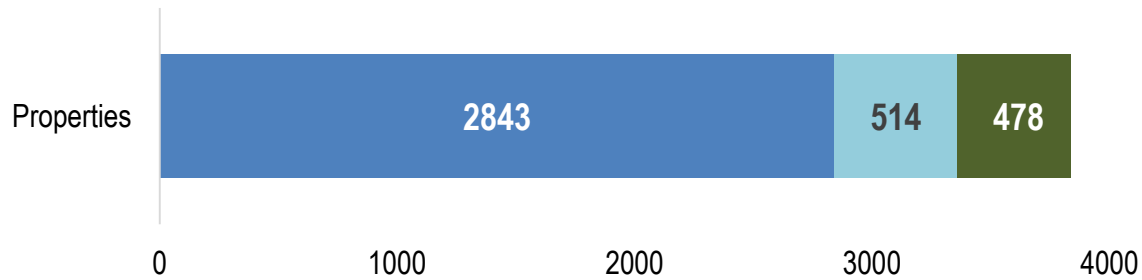
## The NYC Retrofit Accelerator's Efficiency Advisors:

- **Work one-on-one** to understand building needs
- **Connect buildings with qualified contractors**
- **Find cash incentives and financing** to help pay for upgrades
- **Train building staff** so they continue to run efficiently
- Support buildings **every step of the way** from project start to finish



# Program Progress

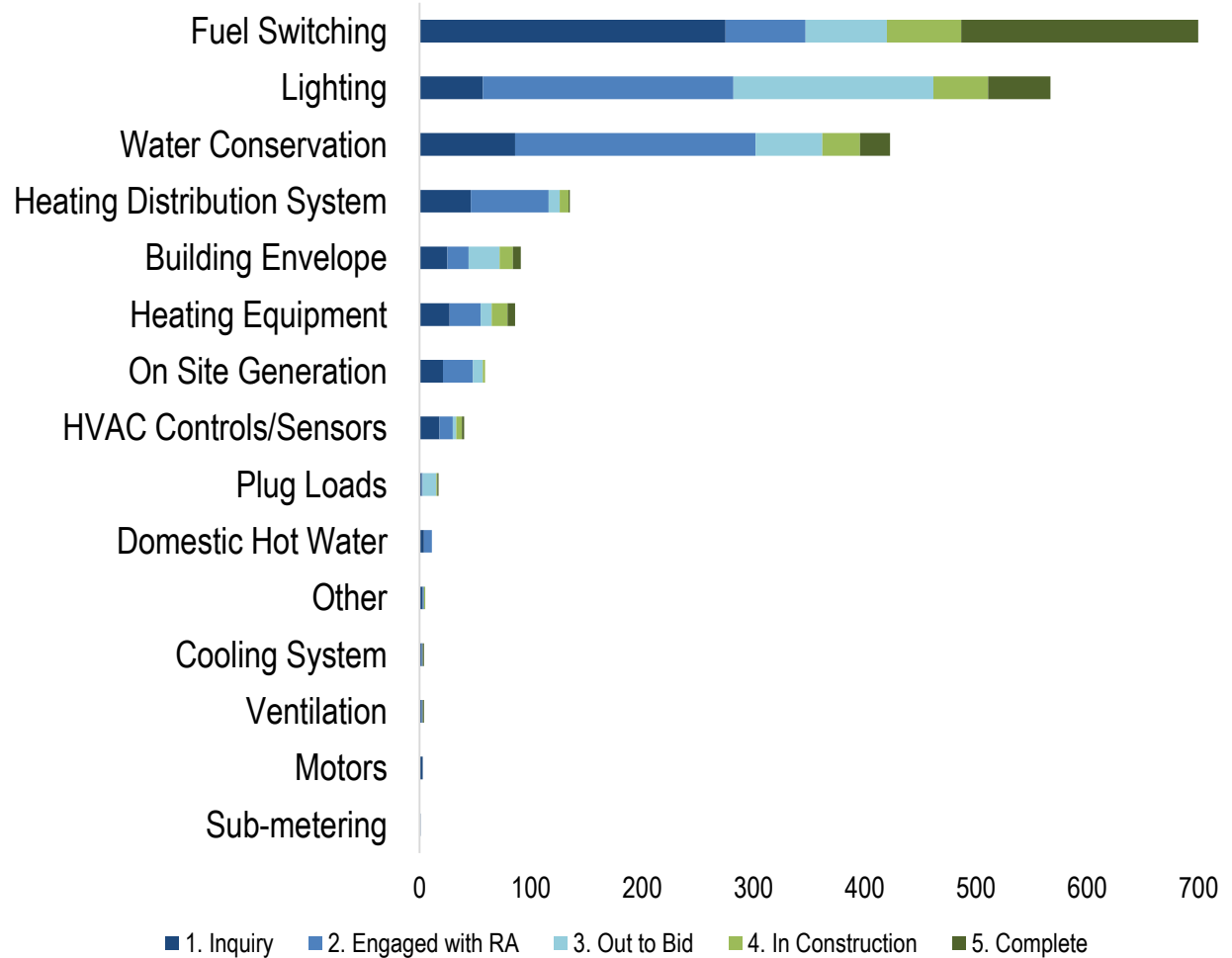
Retrofit Accelerator Buildings  
As of February 2017



Total Buildings = 3,800

Total Potential GHG Reductions =  
**~100,000 metric tons CO<sub>2</sub>e**

Retrofit Accelerator Projects  
As of February 2017





# Data-driven Targeting Strategy

- Identifies buildings based on:
  - GHG reduction potential
  - Specific project opportunities
- Enables prioritization of:
  - Program outreach to buildings across NYC
  - Buildings within large portfolios



# NYC Greener, Greater Buildings Plan

THE NEW YORK CITY

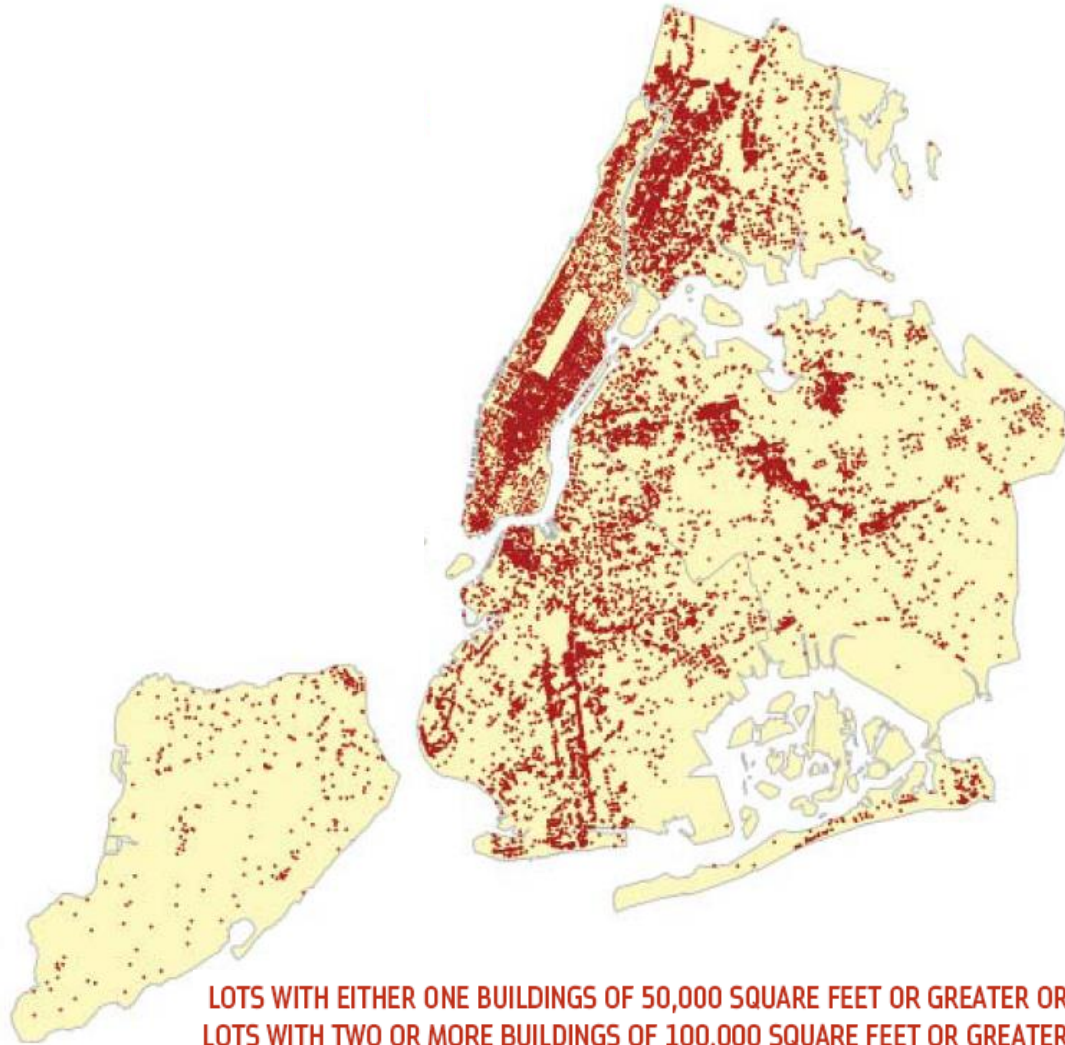
## GREENER, GREATER BUILDINGS PLAN

**1** New York City Energy Code

**2** Benchmarking

**3** Audits and  
Retro-commissioning

**4** Lighting Upgrades and  
Sub-metering

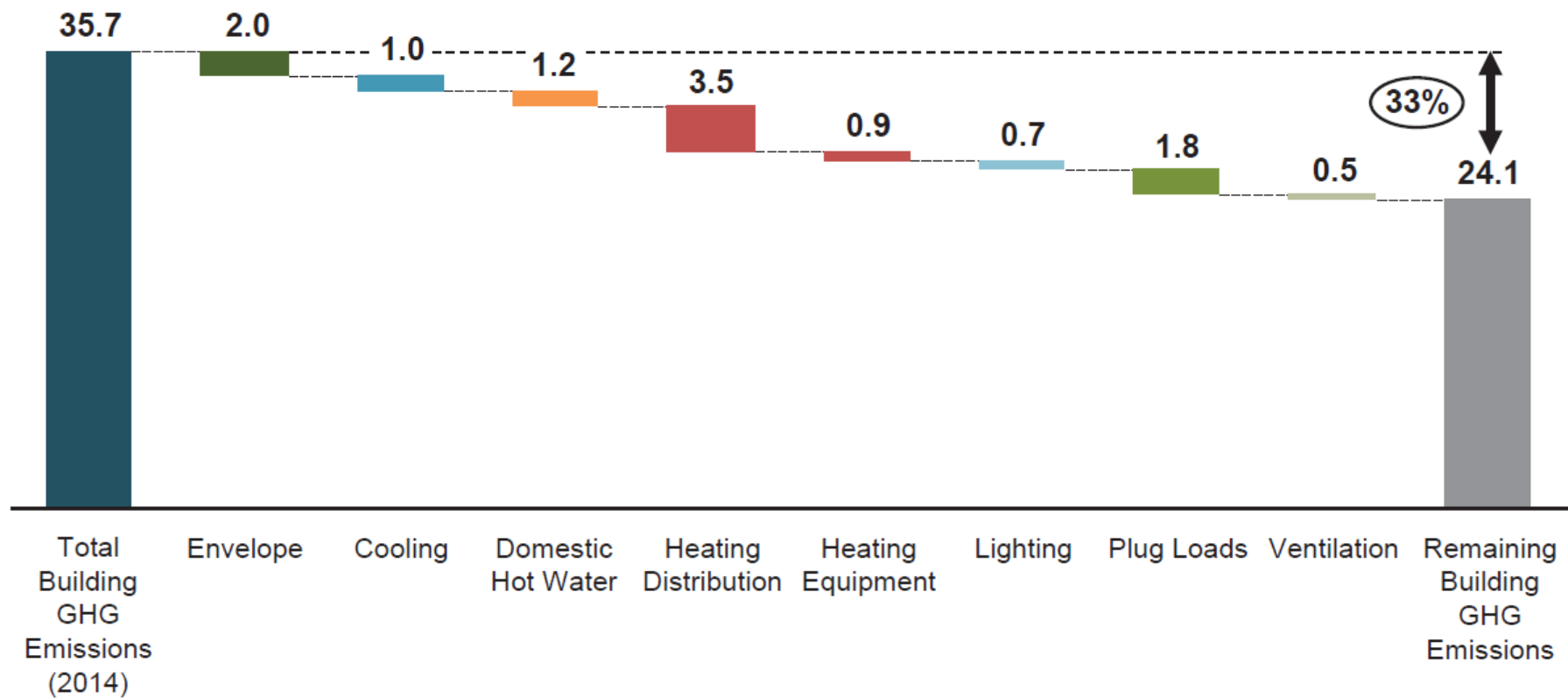


LOTS WITH EITHER ONE BUILDINGS OF 50,000 SQUARE FEET OR GREATER OR  
LOTS WITH TWO OR MORE BUILDINGS OF 100,000 SQUARE FEET OR GREATER



# Citywide Analysis of ECMs

Technical Potential for GHG Reductions from ECMs by Building System



Source: *One City: Built to Last Technical Working Group Report*

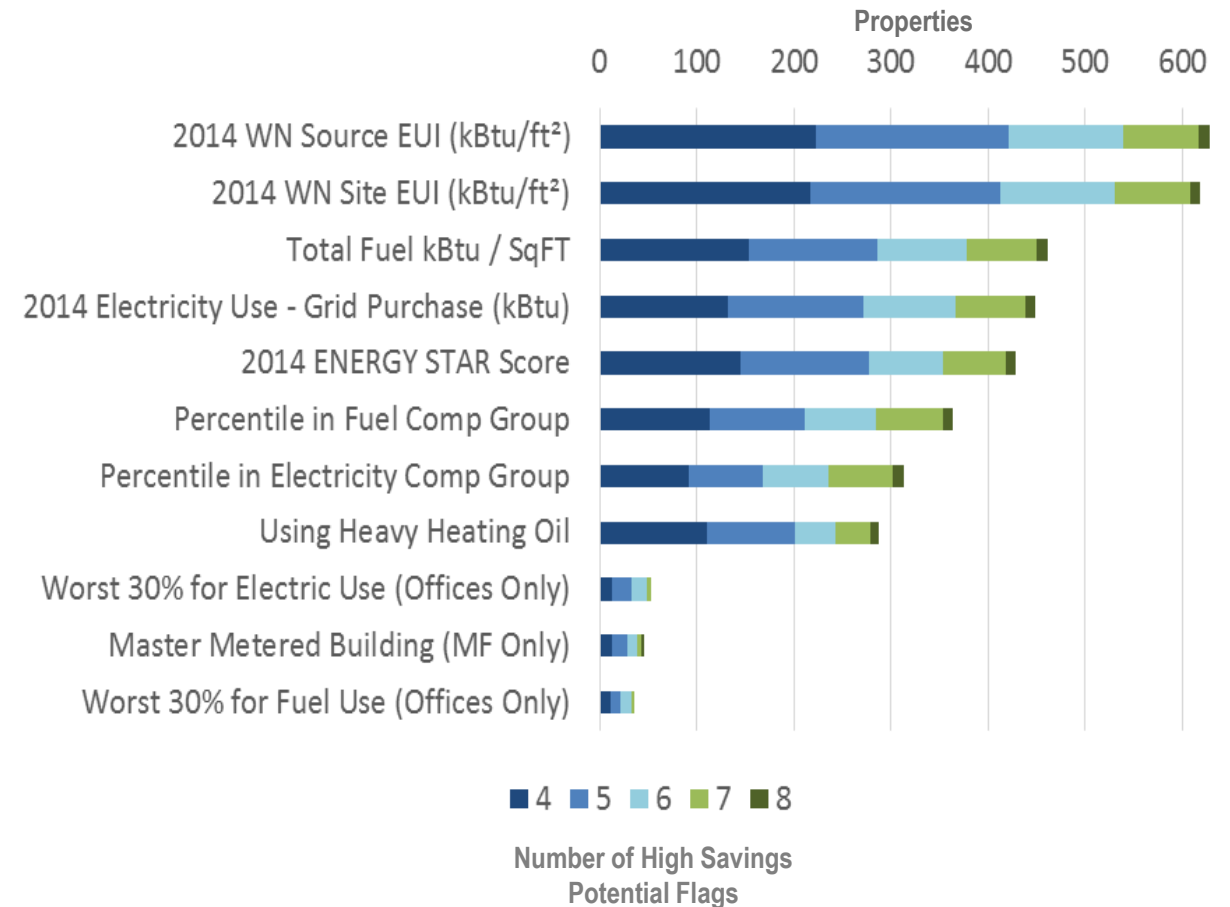


# Identify and Prioritize: GHG Reduction

## High Savings Potential

- Data flags indicate high consumption
  - Benchmarking data: Top 30% EUI compared to peers
- Identify top 1,000 buildings with the greatest number of flags

## Data Flags for Savings Potential



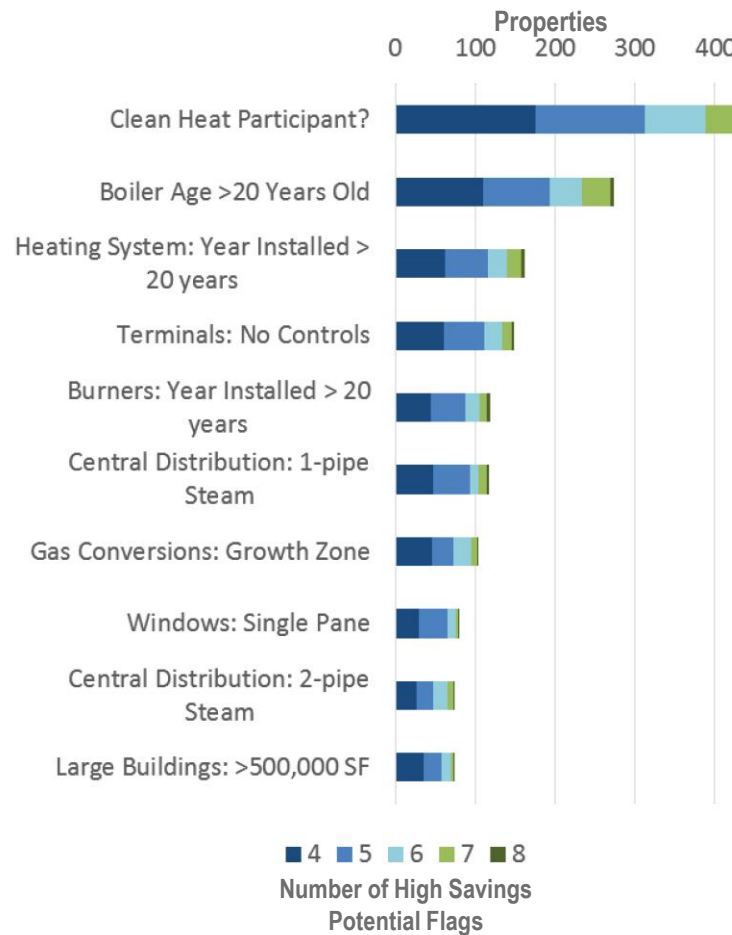


# Identify and Prioritize: GHG Reduction

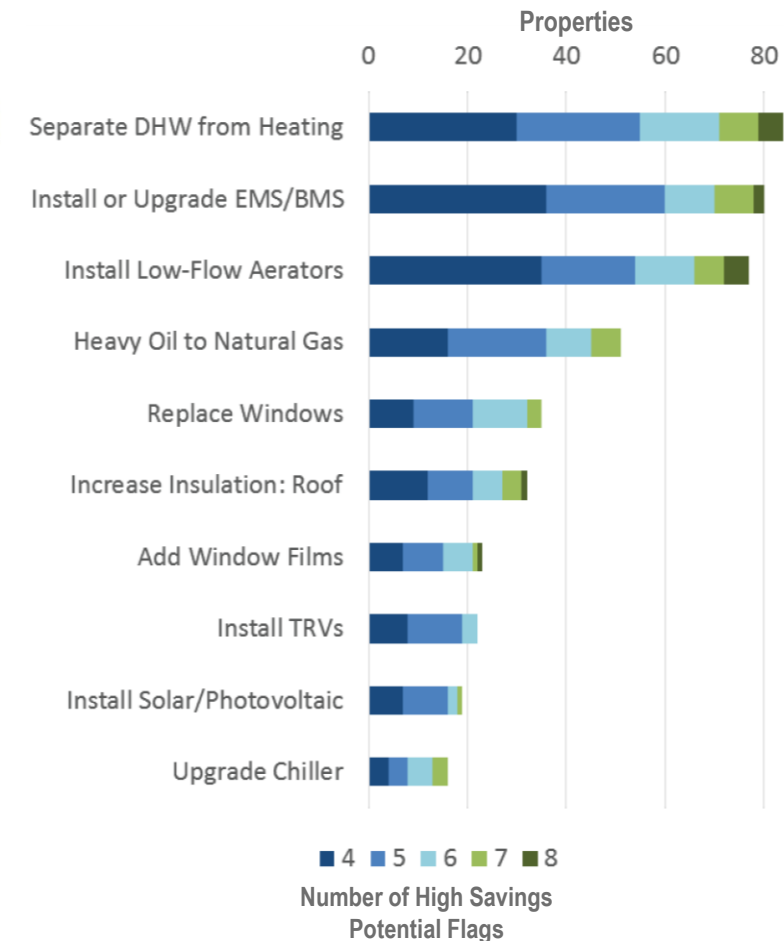
## High Opportunity Projects

- Potential for capital projects based on:
  - System characteristics
  - ECM recommendations

High Opportunity Systems



High Opportunity ECMs (LL87)





# Identify and Prioritize: GHG Reduction

High Savings Potential

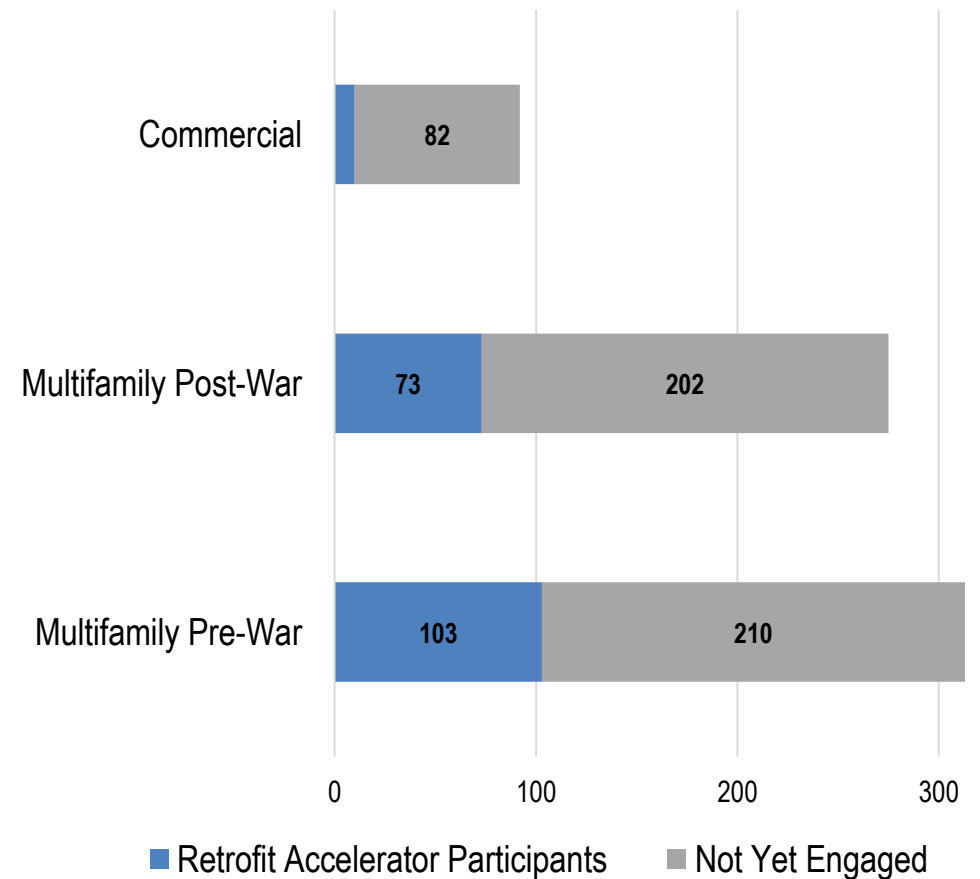
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High Opportunity Projects

=

**High Priority Properties**

Retrofit Accelerator High Priority Properties



# Identify and Prioritize: Need for Assistance

- Financial Need
  - Subsidized housing, rent regulated, arrears, low-income area
- Resiliency Need
  - Flood zone, heat vulnerability
- Health Need
  - Poor air quality, high incidence of pollution-related illness





# Outreach Opportunities

- Projects that resonate with building decision-makers
  - Steam heating system upgrades
  - Solar installations
  - Fuel conversion
- Allows for assistance even with no energy audit



# Portfolio-level Analysis

- Provide portfolio managers with actionable information
- Identify replicable project opportunities
- Highlight high priority properties





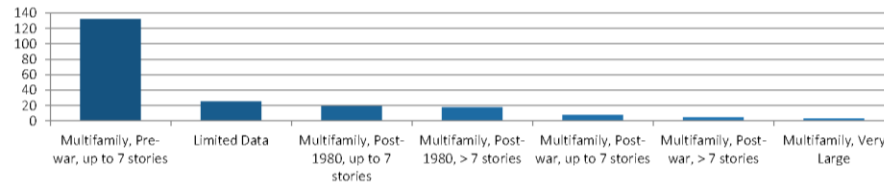
# Portfolio-level Analysis



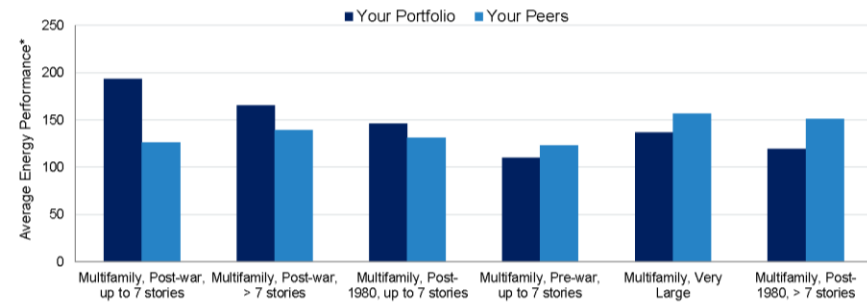
## Portfolio Summary Snapshot: C and C

The Portfolio Summary Snapshot provides a high-level glimpse of the portfolio. Buildings are separated into typologies, which are comparable groups of peers. These peers typically share similar characteristics, systems, and opportunities for improving operations. Using typologies to identify opportunities can be a good way to evaluate buildings that have not yet had a full energy audit completed.

Building Count by Typology

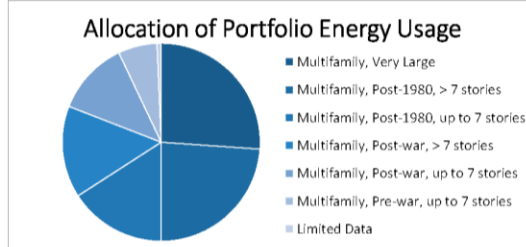


Your Average Energy Performance Compared to Peers



\*Performance defined as Average Weather Normalized Source Energy Use Intensity (kBtu/ft<sup>2</sup>)

Key Portfolio Recommendations and Quantity of Applicable Buildings	
LL87 Compliance (2017, 2018 & 2019)	17
Better Steam Heat	10
Elevator Shafts	18
Resiliency	19
Boiler Optimization / Draft Control	10
Notes:	



## Targeted Building Improvement Opportunities

This page provides a summary of the properties that have multiple opportunities for upgrades as indicated below. These properties are considered good candidates for each opportunity and likely have numerous opportunities for savings and improvement.

Custom Combination of Opportunities	
Selection Description	
Steam Heating System Upgrades	
Spending Through the Roof	
Draft Control	
Resiliency	

Applicable BBLs	Building Address
1017370001	620 LENOX AVENUE
1017370015	45 WEST 139 STREET
1017370025	2300 5 AVENUE
1017370059	60 WEST 142 STREET
1017370069	630 LENOX AVENUE
0	

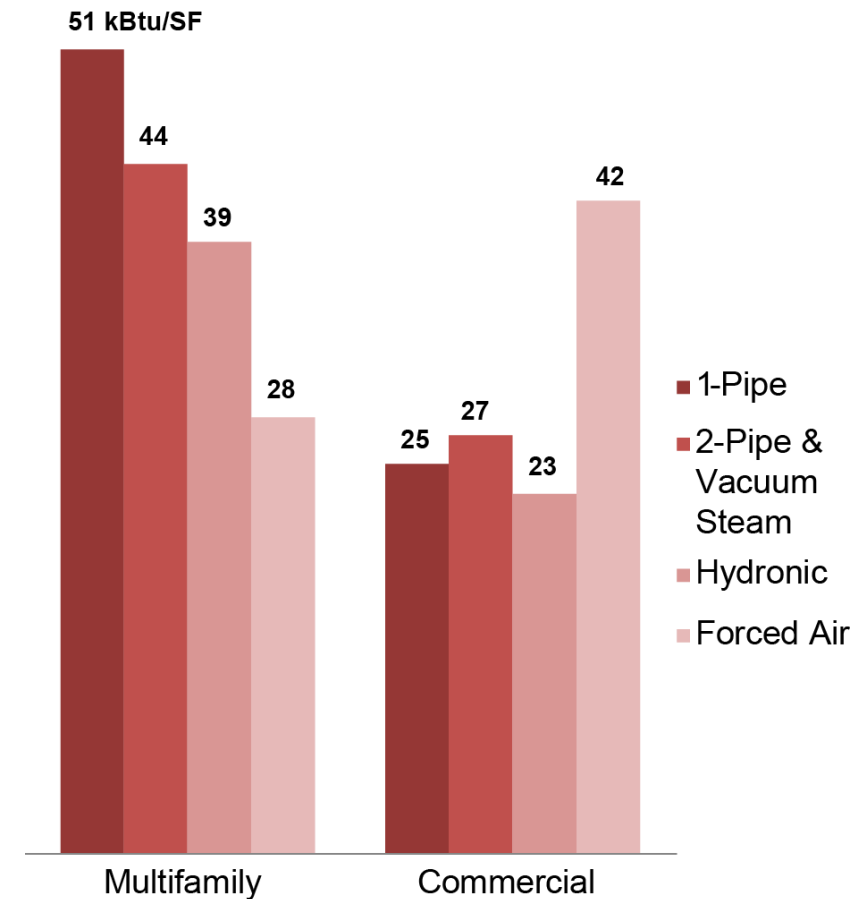
Resiliency	
Resiliency came to the forefront of many New Yorkers' minds when Hurricane Sandy caused widespread damage. According to FEMA data, the following properties are located in flood zones. Buildings located in flood zones can improve storm resiliency by increasing sustainability, engaging in emergency planning, and adding distributed generation to provide power in the event of a black or brownout. Buildings that use less energy can perform better during grid outages than their less-efficient counterparts.	

Applicable BBLs	Building Address
1017370001	620 LENOX AVENUE
1017370015	45 WEST 139 STREET
1017370025	2300 5 AVENUE
1017370059	60 WEST 142 STREET
1017370069	630 LENOX AVENUE
4159260001	57-15 ROCKAWAY BEACH BLVD
1016370023	155 EAST 109 STREET
1016550013	229 EAST 105 STREET
1016550014	231 EAST 105 STREET

# Better Steam Heat Campaign: The Problem

- **70% of large buildings** in NYC have steam heating distribution systems
- Steam systems are often **poorly maintained**, leading to:
  - Energy Waste
  - Uneven heating in apartments
  - Banging Pipes
- The **market does not provide the services** for comprehensive steam system upgrades

Median Heating EUIs by Heating System Type



Source: 2013 and 2014  
Local Law 87 Submissions



# Better Steam Heat Campaign: The Solution

The NYC Retrofit Accelerator will launch an outreach and assistance campaign to help building owners upgrade their steam heating systems.

- Define the Upgrades
- Develop the Market
- Generate Demand
- Provide Technical Guidance





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**NYC**  
Mayor's Office  
of Sustainability  
Mayor Bill De Blasio

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