NEW YORK CITY HOUSING AUTHORITY

Energy Storage Solutions for NYCHA

New York City Solar + Storage Summit
June 24, 2026

Agenda

Introduction to NYCHA

Sustainability at NYCHA

Battery Energy Storage Systems at NYCHA (BESS)

Breakout Discussions on BESS Solutions

Next Steps

NYCHA aims to provide quality, sustainable housing for New Yorkers while fostering economic mobility

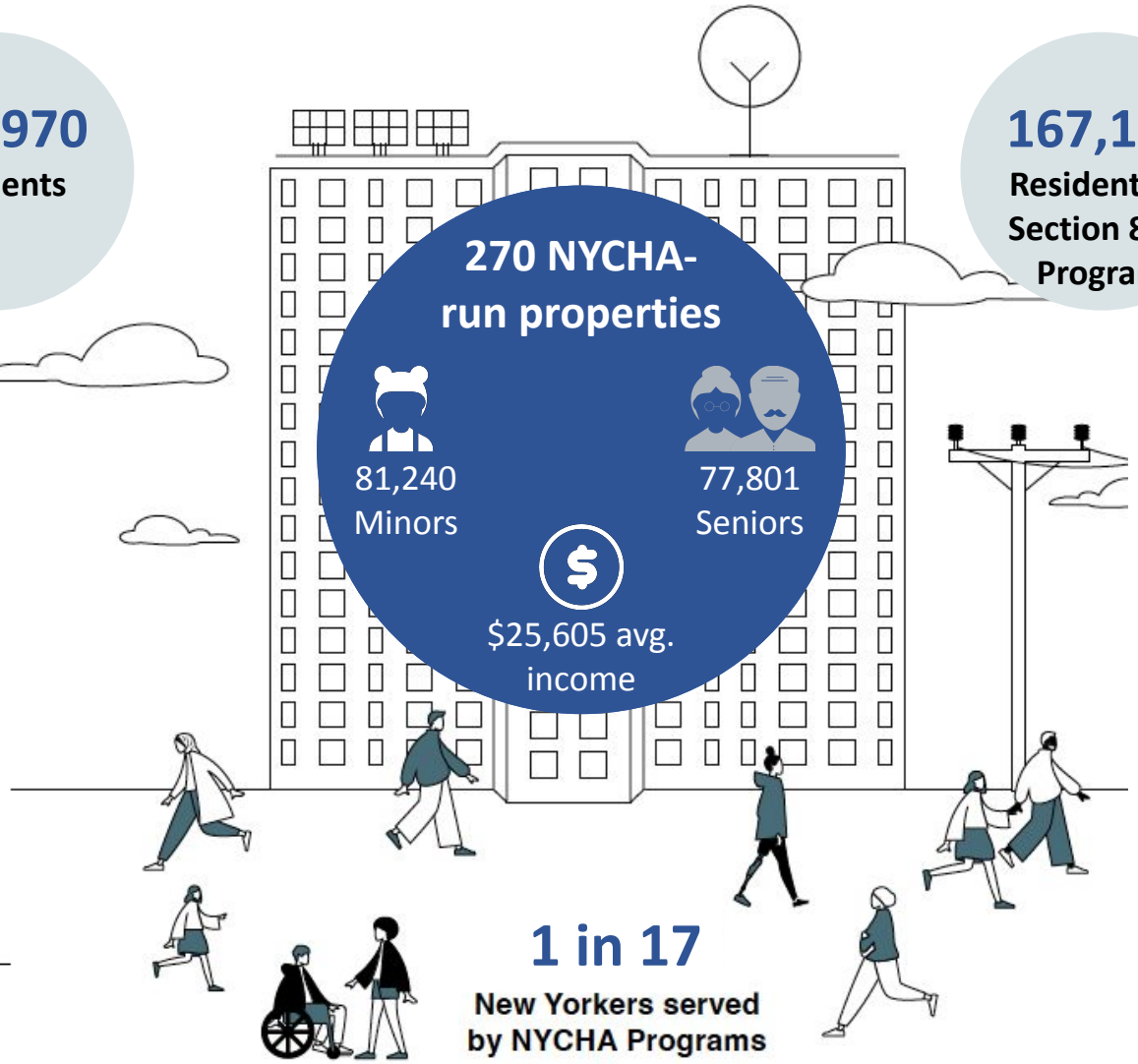
335
Properties

2,212
Resident Buildings

177,569
Apartments

360,970
Residents

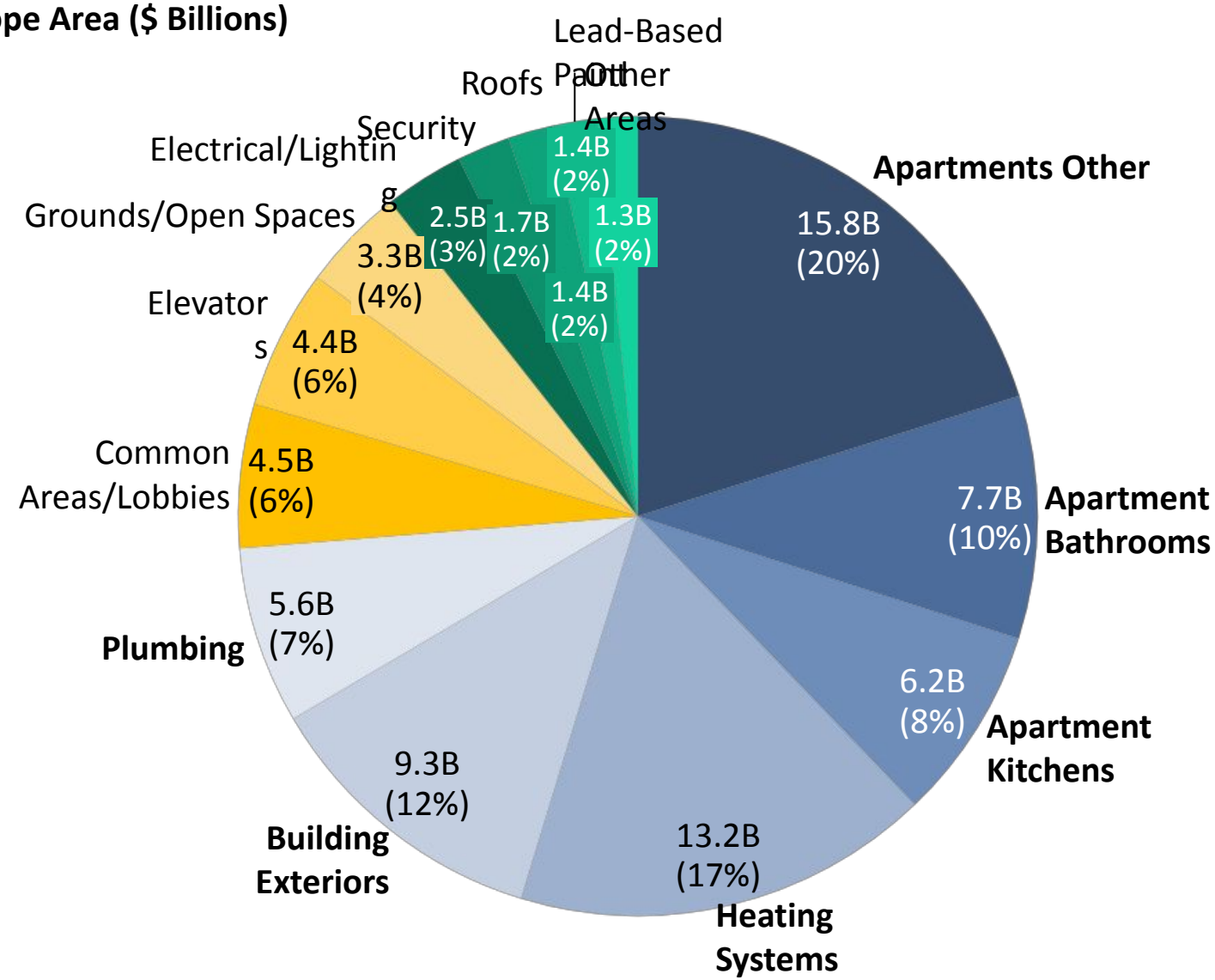
167,135
Residents in Section 8 LH Program



Campuses and buildings spread across NYC

20-year Physical Needs Estimate of $78.3B

Physical Needs By Scope Area ($ Billions)



"Apartments Other" category primarily includes apartment floors, doors, light fixtures, radiators, and electrical panels. "Other areas" includes Waste Management, Section 504 (apartments), Fire Protection, and Ventilation / Air Conditioning.

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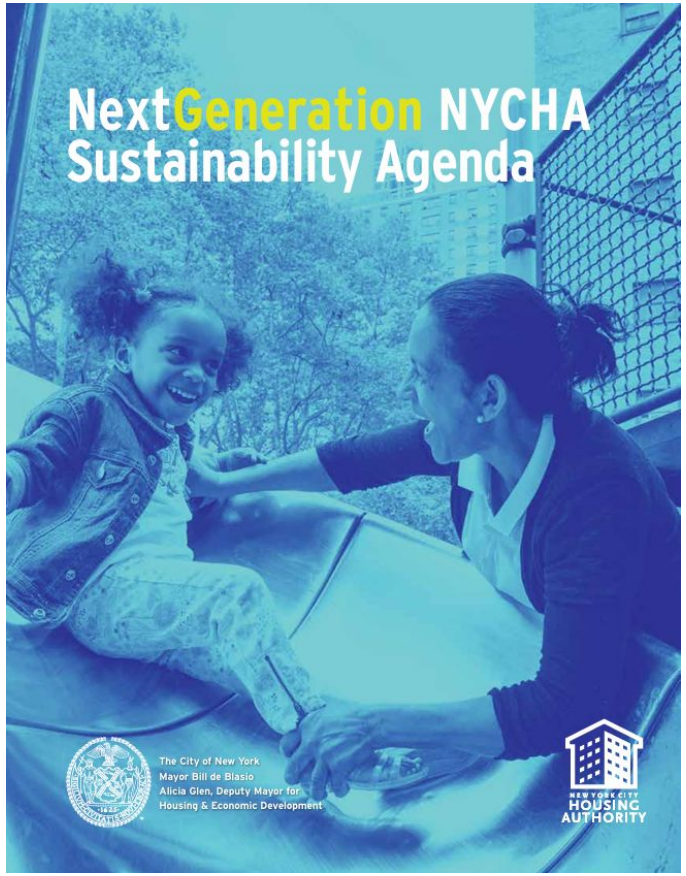
NYCHA's 2026 Sustainability Agenda builds on progress established by Agendas released in 2016 and 2021

2016: ***Building a Foundation***



2021: ***Piloting Diverse Approaches***

2026: ***Innovating at Scale***

Authority-wide priorities shape NYCHA's approach to sustainability

Housing Quality

- PROPERTY PHYSICAL NEEDS
- INCREASED FUNDING FOR PROPERTIES
- RESIDENT HEALTH AND WELL-BEING

Climate Protection

- RESILIENCY TO FLOODING
- ENERGY & WATER USE & GHG EMISSIONS
- RESILIENCY TO EXTREME HEAT

Agenda lays out nine sustainability and resiliency goals to achieve in the next 5 years (by April 2031)

GOAL 1

20,000 apartments with heat pumps

GOAL 2

45,000 apartments with efficient water and lighting fixtures

GOAL 3

10,000 induction stoves installed

GOAL 4

144 properties with modernized waste infrastructure

GOAL 5

146 buildings protected from climate-related disruptions

GOAL 6

15 developments with new waste plumbing lines

GOAL 7

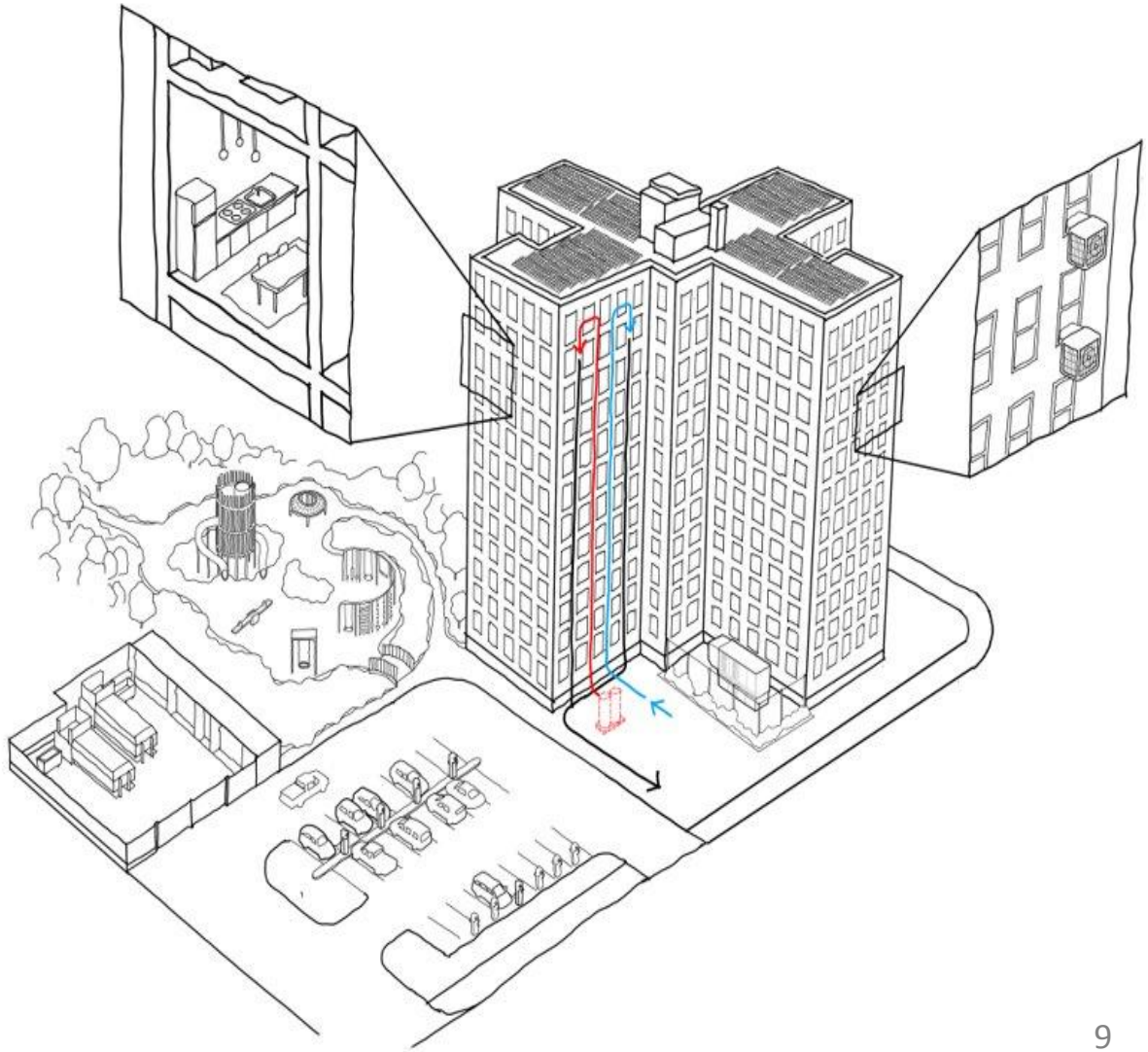
150 EV charging stations

GOAL 8

30 MW of solar power installed

GOAL 9

1,300 residents benefiting from economic opportunity through NYCHA sustainability work



With CUNY support, NYCHA launched ACCESSolar in 2018

ACCESSolar

- Accelerating Community Empowered Shared Solar focuses on community benefits and building local solar capacity
- 3 MW built so far across 67 roofs and 5 developments
- 25 NYCHA residents hired; >600 LMI households involved

Community Shared Solar (CSS)

- All NYCHA solar systems are roof leases for community solar
- NYCHA receives power from the New York Power Authority (NYPA). NYPA's low rates make PPAs uneconomical, so NYCHA residents can't participate in community solar
- All NYCHA-hosted projects must set aside a percentage of capacity to verified LMI households

"I feel like I'm a positive influence. I didn't think I was the person who would make a positive change or impact until I got here and started doing it, and it's been really moving so far."

Johan Ortiz *(Albany House resident), Program participant*
Source: Queens Eagle

Goal 1: Install heat pumps in 20,000 apartments

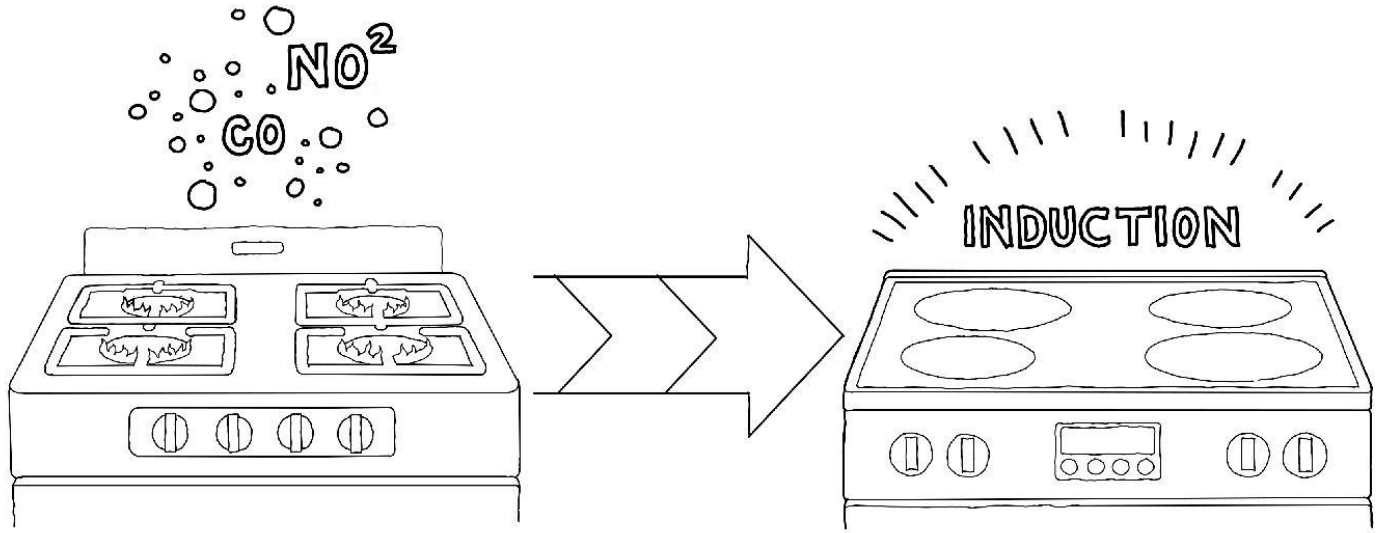
Possible battery energy storage role:

- Offset the additional electric load required to accommodate heat pumps
- Reduce utility costs through demand management
- Produce revenue stream through demand response

Goal 3: Install induction stoves in 10,000 apartments

Possible battery energy storage role:

- Reduce electrical upgrade needs by making use of battery integration into appliance



Goal 5: Protect 146 buildings from climate-related disruptions

Possible battery energy storage role:

- Provide backup power for critical infrastructure at residential buildings
- Provide backup power at community centers that function as cooling spaces

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There are three opportunities for BESS that support 2026 Sustainability Agenda goals and financing needs.

Avoid electrical upgrades caused by new electrical loads like heat pumps & induction stoves

Goal 1 and Goal 3 will add new loads that may exceed the electrical capacity at many NYCHA properties. The cost to upgrade electrical capacity will be substantial. Batteries can smooth peak demand to avoid service upgrades.

Power elevators, and other key loads during outages

Goal 5 aims to protect buildings from climate disruptions that may cause power outages. Batteries can provide backup power for essential loads like elevators, common-area lighting, and community centers.

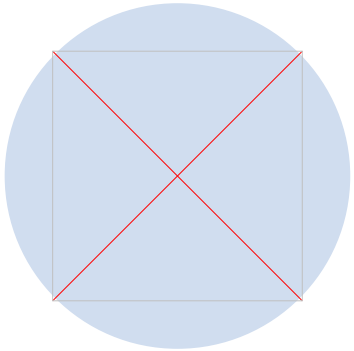
Participate in DR or wholesale energy markets

To **finance** these goals and other sustainability projects, NYCHA can earn revenue by participating in demand response programs, the wholesale energy market, voltage support, frequency stabilization and other avenues.

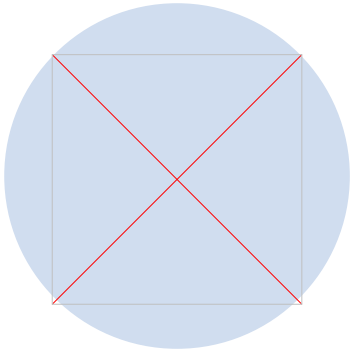
Five areas we are interested in learning more about

Financing	Functionality	Operations	Ownership	Regulations
Who should pay for the system? Under what contract terms and length?	What use cases are realistic? What size do we need for each level?	What new maintenance will now be required? What new staff skills will be needed?	Is the owner the operator? financer? How do we balance resident benefit with ownership priorities?	What approvals are necessary? What site constraints have we not considered?

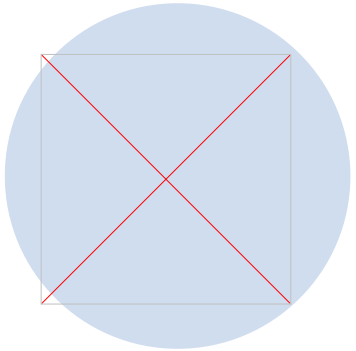
Design, Siting, and Stakeholder Considerations



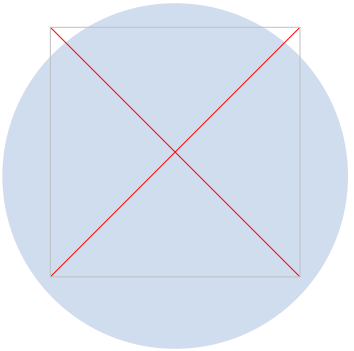
Sufficient space from hazards



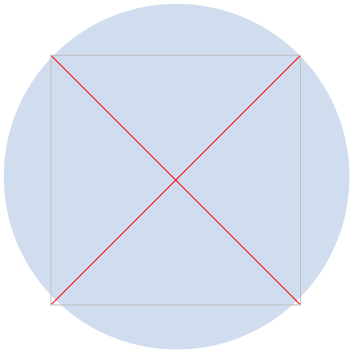
Portable batteries should be secured



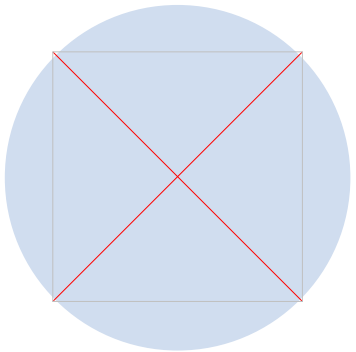
Installations should be fire safe



Minimize impact on resident areas



Avoid rewiring



When possible avoid long-term contracts and proprietary technology

What BESS solutions are viable for NYCHA?

What are the barriers and opportunities for financing, functionality, operations, ownership, and regulation?

Image sources: Woodside Houses, Jordan Bonomo; Pilkington Site, Energy Storage News; Jackson Houses, Konrad Kuriata

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Individual Brainstorm

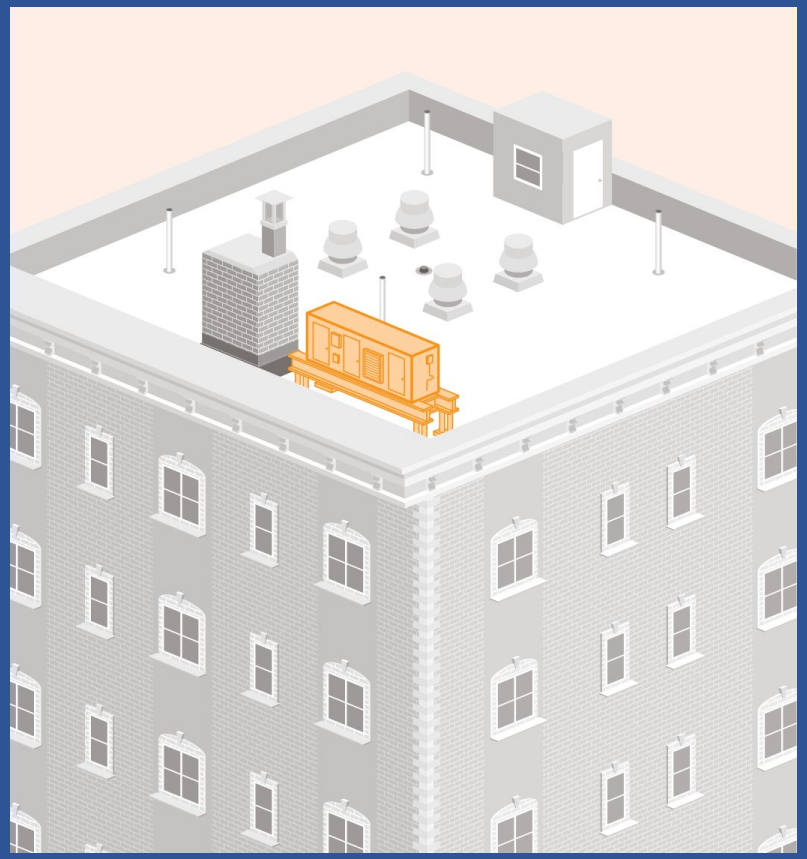

Image Source: Enterprise

Based on what you heard today about BESS opportunities at NYCHA, please take a few moments to:

- Write potential BESS solutions on BLUE sticky notes (one idea per note)
- Write barriers and concerns on ORANGE sticky notes (one barrier per note)

Group Discussions

- **Electrical Upgrades**
- **Resiliency**
- **Grid Services**

Based on what you heard today about NYCHA's BESS needs, please work as a team to:

- Suggest BESS solutions for financing, functionality, operations, ownership, and regulations.
- Propose who would do what, and how it might be done.
- Identify any barriers to success (i.e., a functionality requirement that is technically achievable but not permittable).

Debrief

Do the proposed BESS solutions address NYCHAs needs?

Are NYCHA's goals too ambitious? Are they realistic?

Are there other battery configurations you think NYCHA should focus on?

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What's next for BESS at NYCHA?

NYCHA will evaluate today's proposed solutions alongside our current list of approaches.

Insights from today's session will guide the development of future programs and/or procurements.

Let us know if you are interested in a follow-up discussion.

Thank you!

NYCHA's Sustainability Agenda:
https://www.nyc.gov/site/nycha/about/sustainability.page

Thanks to Sustainable CUNY for their long-term partnership supporting NYCHA's solar goals (technical assistance, partnership-building, publicity, hosting)! CUNY email: nysolar@cuny.edu