



Empire Building Challenge (EBC)



AMALGAMATED HOUSING COOPERATIVE

Who We Are

- First opened in 1927, Amalgamated Housing Corporation (AHC) was sponsored by the Amalgamated Clothing Workers Union and built under the Limited Dividend Law of 1926 for our inaugural 303 families.
- AHC is **the oldest affordable limited equity housing cooperative** in the nation.
- We survived the Great Depression and then grew in stages. This success caused AHC to become the **inspiration and model** for limited equity cooperative housing in the United States.



Our Buildings

- AHC has grown from the original 303 apartments to nearly **1,500 apartments in thirteen buildings**. Through the years, thousands of families have benefited from living here.
- AHC is supervised by New York State Homes and Community Renewal, Division of Housing and Community Renewal.
- The value of assets under our ownership and management is **\$650,000,000**.
- **Our investment thesis** is to maintain AHC as an affordable housing cooperative to benefit all current and future shareholders.



Our Mission

- Our mission is two-fold:
 - To provide **quality housing** and **a strong community** for people of moderate income.
 - To operate and live in accordance with the **cooperative ideals**, including democratic governance, shared responsibility, constant education, and mutual respect.
- AHC is not just buildings and apartments; we are a community.



Our Community

- Democratically governed, AHC remains committed to **Cooperative Principles**.
- Our **community activities**:
 - Are available for **all ages**, ranging from Nursery to NORC (Naturally Occurring Retirement Community).
 - Cover **wide-ranging interests**, from craft studios and art exhibits, to concerts and International Night, to our discussion programs and Education Department.



Our Approach to Sustainability

- For decades AHC has been an **early adopter of energy efficiency and green initiatives.**
- Our active Eco Group volunteers enhance community-wide recycling, composting, and eco-education.
- **We want to continue to lead the way** in sustainability and carbon reduction.





Our Commitment to the NYSERDA EBC

“The lack of affordable housing in New York City is at the heart of a housing crisis for thousands of families who cannot find a safe and well-maintained place to live.

AHC’s core mission is to provide quality housing and community for people of moderate income. This mission also encompasses operating and living in accordance with cooperative ideals, including democratic governance, shared responsibility, constant education, and mutual respect.

*Our commitment for the NYSERDA Empire Building Challenge fits our mission and investment thesis because it helps to maintain our property and **enhance the quality of life and comfort** of our shareholders **in the most cost-effective way possible.**”*

- Charles M. Zsebedics, AHC General Manager

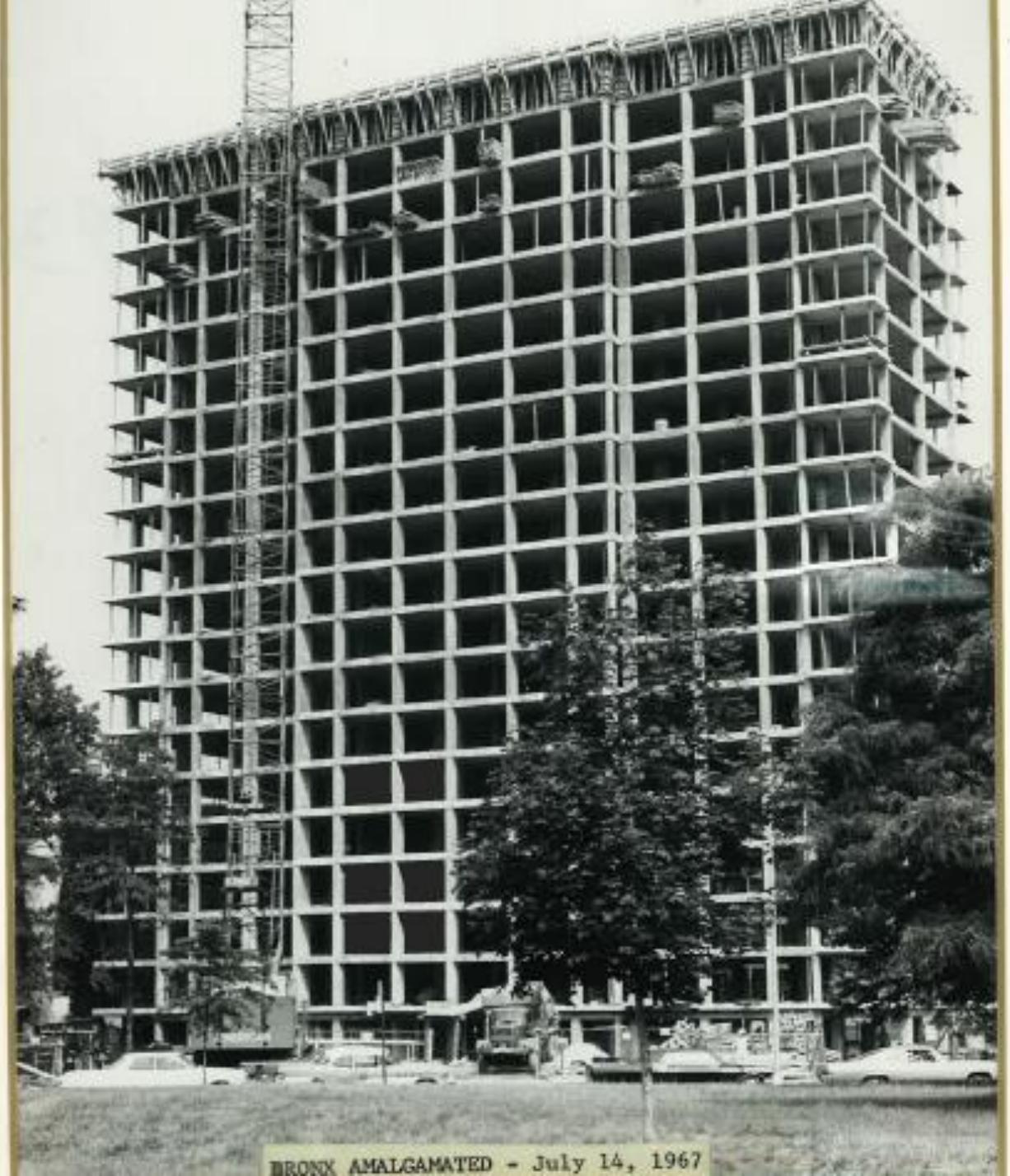


Towers 1 and 2

Empire Building Challenge (EBC)

The Towers

- Two AHC buildings, **Tower 1 and Tower 2**, will participate in EBC. The Towers share many characteristics:
 - **Age:** Built in 1968 (Tower 1) & 1971 (Tower 2)
 - **# of Stories:** 20 Floors
 - **Heating:** High-pressure steam from the complex's dual-fuel boiler plant
 - **Cooling:** Single-stage steam absorption chiller
 - **Distribution:** Dual temperature loop
 - **Façade:** Brick masonry



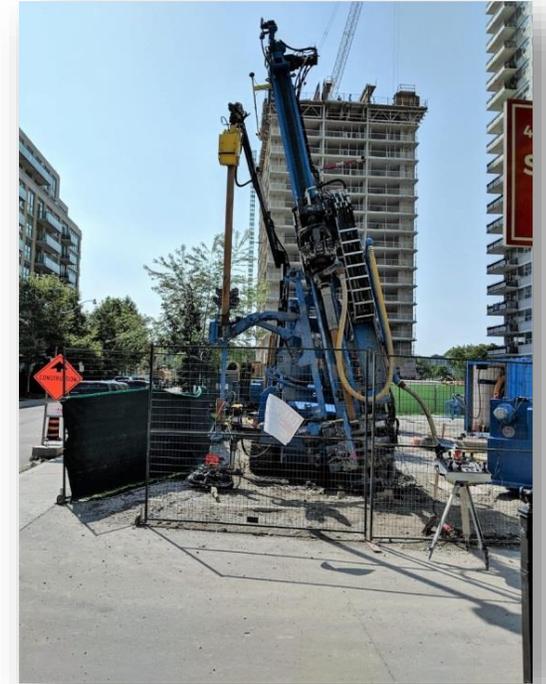
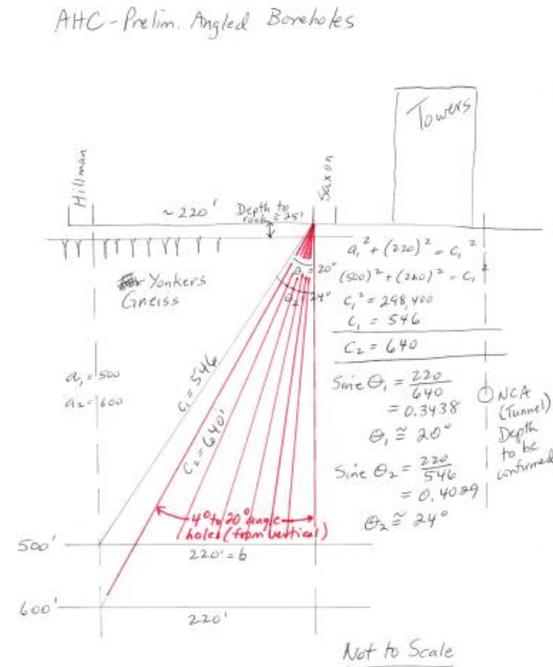
Intent of EBC Study

- Under NYSERDA's EBC, AHC commits to reducing the Towers' **energy use** from a site energy use index (EUI) of **111.5 to 40** by 2035.
 - This represents a decrease of carbon emissions from **2,741 tons to zero**.
- To meet these goals, AHC aims to:
 - **Improve overall building energy efficiency** through holistic measures,
 - Eliminate dependence on steam by **electrifying** the heating, cooling, and DHW systems,
 - Undergo a **phased disconnection** of boiler and chiller plants, cooling tower, and heat exchangers, and
 - **Overhaul** the aging distribution system.



Proposed Measures

- We plan to pursue a **holistic retrofit** with our consultants, EN-POWER GROUP (ENPG) and Egg Geo, to maximize project effectiveness. We will explore improvements such as façade retrofits, ventilation upgrades, and more.
- Additionally, we will explore major improvement measures including:
 - **Geothermal heat pump system** for heating, cooling, and domestic hot water (DHW) supported by a new distribution system and associated pumps.
 - **Wastewater energy recovery system** to be integrated into the new geothermal system.





Value of Our NYSERDA Partnership

- AHC values NYSERDA’s “**seal of approval**” in determining what technologies are worth pursuing
- Moreover, AHC’s history and values align with NYSERDA’s approach to **open sharing of information to improve energy efficiency and reduce greenhouse gas emissions**. We envision our NYSERDA partnership further **reinforcing and supporting these values**, which include those outlined by the International Cooperative:
 - Principle #5 – Education, Training and Information,
 - Principle #6 – Co-operation Among Cooperatives, and
 - Principle #7 – Concern for Community.



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Testimonial:

*“From the beginning Amalgamated Founders and Pioneers demonstrated that limited equity cooperative housing offers an excellent way to bring affordable home ownership to working families of moderate means. **Today we are proud to partner with NYSERDA in demonstrating that existing residential buildings can be retrofitted with innovative energy approaches** to reduce energy consumption, reduce greenhouse gas emissions, reduce costs, and improve comfort for residents of affordable and cooperative housing.”*

- Ed Yaker, AHC Board Treasurer



Thank You!