

Gradient partners with three Mass. housing authorities to deploy window heat pumps

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Boston, MA Gradient, manufacturer of smart heating and cooling solutions designed for a decarbonized future, is partnering with the Boston Housing Authority (BHA), the largest public housing authority in New England to reduce costs, emissions, and energy usage in public housing, and advance the goals of the city of Boston's Climate Action Plan.

To kick off this partnership, 100 Gradient All-Weather 120V window heat pumps are being installed at the Hassan Apartments, a public housing community for seniors and adults with disabilities. The window heat pumps replace the building's aging electric resistance system and bring in-unit air conditioning to Hassan Apartment residents for the first time.

The heat pumps provide both heating and cooling while dramatically reducing energy use and building sector carbon emissions at a fraction of the cost of traditional wall-mounted heat pumps.

In addition to BHA, Gradient is partnering with two additional Massachusetts housing authorities: Chelsea Housing Authority (CHA), and Lynn Housing Authority & Neighborhood Development (LHAND). Together with BHA, the three housing authorities – collectively called the Green Trio – have previously joined forces on sustainability efforts and funding grant applications to strengthen their collective impact. All three housing authorities are partnering with Gradient to replace inefficient and outdated heating sources with Gradient All-Weather 120V window heat pumps. Each organization has established itself as a leader in state public housing electrification, and together they represent the most ambitious decarbonization effort in Massachusetts public housing.

The Climate Numbers:

- 70% of Boston's emissions come from the building sector, including housing, according to Boston's most recent greenhouse gas emissions inventory; and
- The Gradient units deliver significant savings over gas-powered steam boilers: 85% 88% energy savings in the apartments tested. The testing data, including comprehensive monitoring during winter operations, confirmed window heat pumps deliver significant energy savings.

The Technology:

Gradient All-Weather 120V Window Heat Pumps

Gradient's All-Weather 120V window heat pumps combine intelligent controls with thoughtful design to overcome installation challenges that have historically slowed electrification in older multifamily buildings.

- Plugs into standard outlet eliminates the need for costly electrical upgrades
- Two-person installation eliminates invasive construction retrofits typical of traditional heat pump installations.
- Provides heating AND cooling provides in-unit air conditioning to Hassan residents for the first time
- Smart technology optimizes performance and comfort enables remote control and integrates with building systems for better energy management.
- Up to 4x more efficient than traditional heating systems.

The Impact:

For Residents: Year-round comfort control, first-time AC access, lower energy costs

For Housing Authorities: Affordable decarbonization path, reduced operating costs, meet climate goals

For Boston: Model for upgrading older housing stock efficiently; aligns with City Climate Action Plan

This represents the most ambitious decarbonization effort in Massachusetts public housing, demonstrating that sustainable solutions can work in affordable housing at scale.

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