A Roadmap to Resiliency for the Country's Aging Housing Stock

Every year, existing building operations account for 27% of carbon emissions globally. That's more than a quarter of the world's emissions contributing to climate change because of where we live and work every day. Fairstead, one of the nation's largest affordable housing operators in the US, is deploying leading-edge technologies to reduce its carbon footprint by making older buildings more efficient. By taking a layered approach focused on energy, water, smart tech, and reduction, the company has significantly reduced emissions in buildings that are over 100 years old, while simultaneously improving the quality of life for residents and neighbors.

Old Building, New Tech

Don't let age fool you. The latest technologies can be deployed in your 100-year-old building: smart HVAC filters and radiator covers, the Micro-CHP that creates a continuous back-up power supply, cool roofs, and more. Our solar and heating systems have reduced CO_2 emissions by more than 440,000 pounds. That's like planting four new trees every day for a year.

Reduction, Reduction, Reduction

The first step is reducing the amount of energy, water, and gas buildings use as much as possible by replacing inefficient appliances and fixtures with Energy Star and low-flow options. Embrace heat pumps and, yes, the electric stovetop. And recycle whenever possible! Our appliance recycling programs with Con Ed have saved over 1.7 million kWh of energy from New York City's power grid – enough to charge 23,000 electric cars.

Knowledge is Power

Empower your residents to take control of their energy usage. Enroll your buildings in demand response programs so residents can monitor in real time and help alleviate strain on the energy grid during peak times. Installing smart thermostats will increase comfort while reducing energy and heat.

Turn Buildings into Energy Generators

Older buildings don't just have to be energy consumers. Move towards renewable, clean energy sources whenever possible. Turn your building's roof into an energy-generator that can be shared with your neighbors through a Community Solar program. Install EV charging stations if you have on-site parking. Our solar projects have produced enough energy to fully charge one cellphone a day for every resident in Savannah, Georgia for a year.

Early Detection for Environmental Protection

Smart technologies teach you how your building operates. Water and boiler monitoring systems allow you to catch costly, resource-draining problems in real time before they have a big impact on the environment. Find that small leak before it becomes a flood and causes damage to your home and wastes a natural resource. Fairstead's water conservation programs have already saved more than 150 million gallons of water, the equivalent of 2.4 billion glasses of water.