Equitable Housing Decarbonization

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Benefits + Risks of Building Electrification
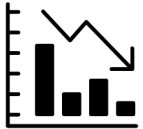
The Benefits of Equitable Building Electrification

Create thousands of local clean energy sector jobs

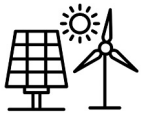Improved indoor and outdoor air quality

Address longstanding health, safety, and resilience needs

Potentially lower energy bills

Potentially more affordable housing

Invest in creating a local clean energy economy

Potential Risks of Building Electrification

- Housing/rental cost increases

- Energy bill increases

- Tenant harassment/displacement

- Long-term gentrification and displacement

- Lack of community trust and buy-in

- Benefits do not reach tenants or low-income communities

- Pushing smaller landlords out of business

- Lack of opportunities for minority- and women-owned contracting firms

- Lack of opportunities for workers of color

- Inability to create family-sustaining jobs

...and more

Building Electrification Institute

Spotlight | Housing and Affordability

At least 40% of renters are housing cost-burdened* in most metro areas across the U.S., and this share is rapidly increasing in many parts of the country.
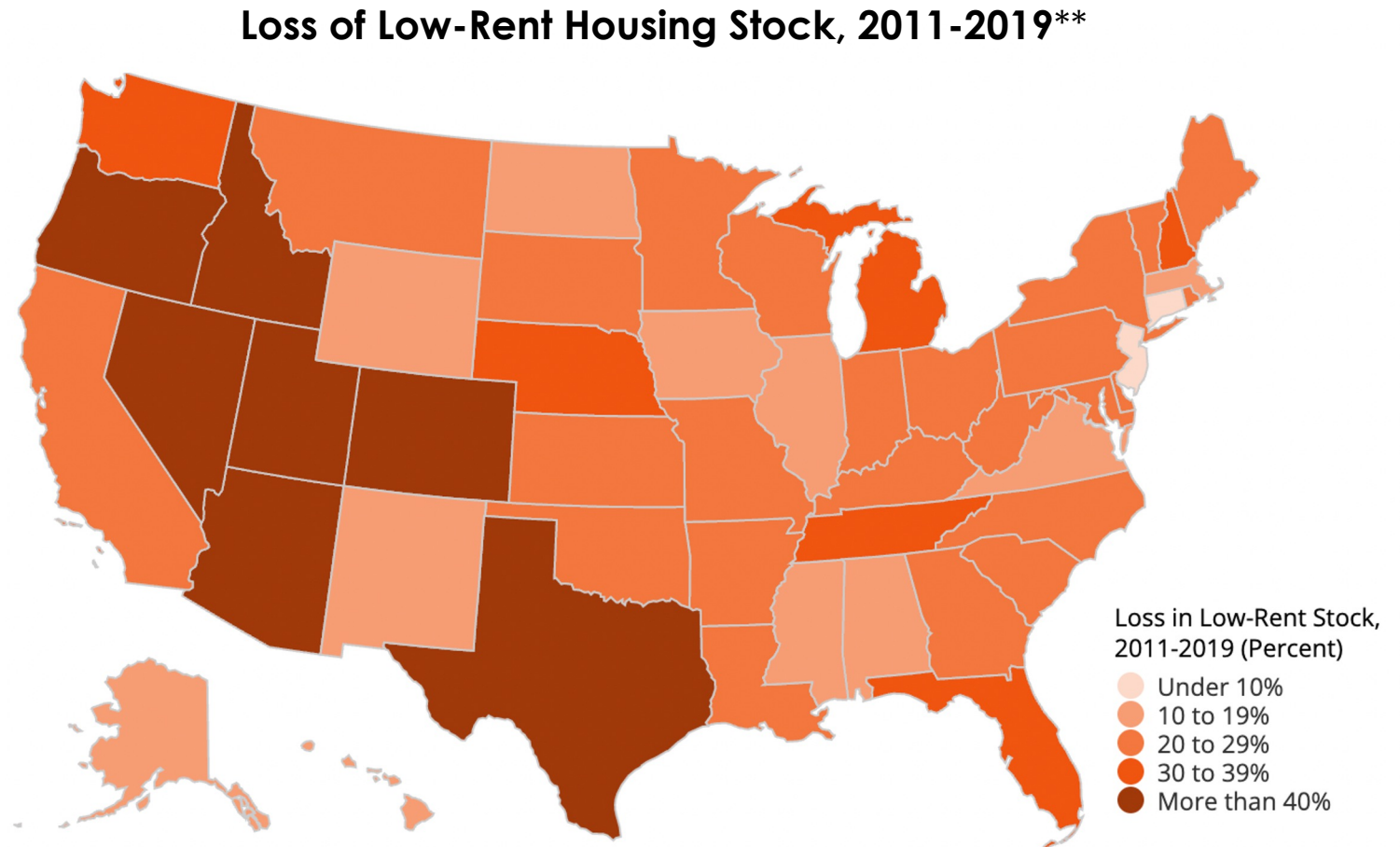
Loss of Low-Rent Housing Stock, 2011-2019**

Loss in Low-Rent Stock, 2011-2019 (Percent)
- Under 10%
- 10 to 19%
- 20 to 29%
- 30 to 39%
- More than 40%

Image Source: Harvard University, Joint Center for Housing Studies

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*Renters that are housing cost-burdened are defined as those paying more than 30% of income on rent and utilities.
**Low-rent housing stock is defined as units with rents under $600 in 2019 dollars.

Spotlight | Health and Safety Needs

Between 20% to 60% of energy incentive program applicants may be deemed ineligible for common programs, including the federal weatherization assistance program.*

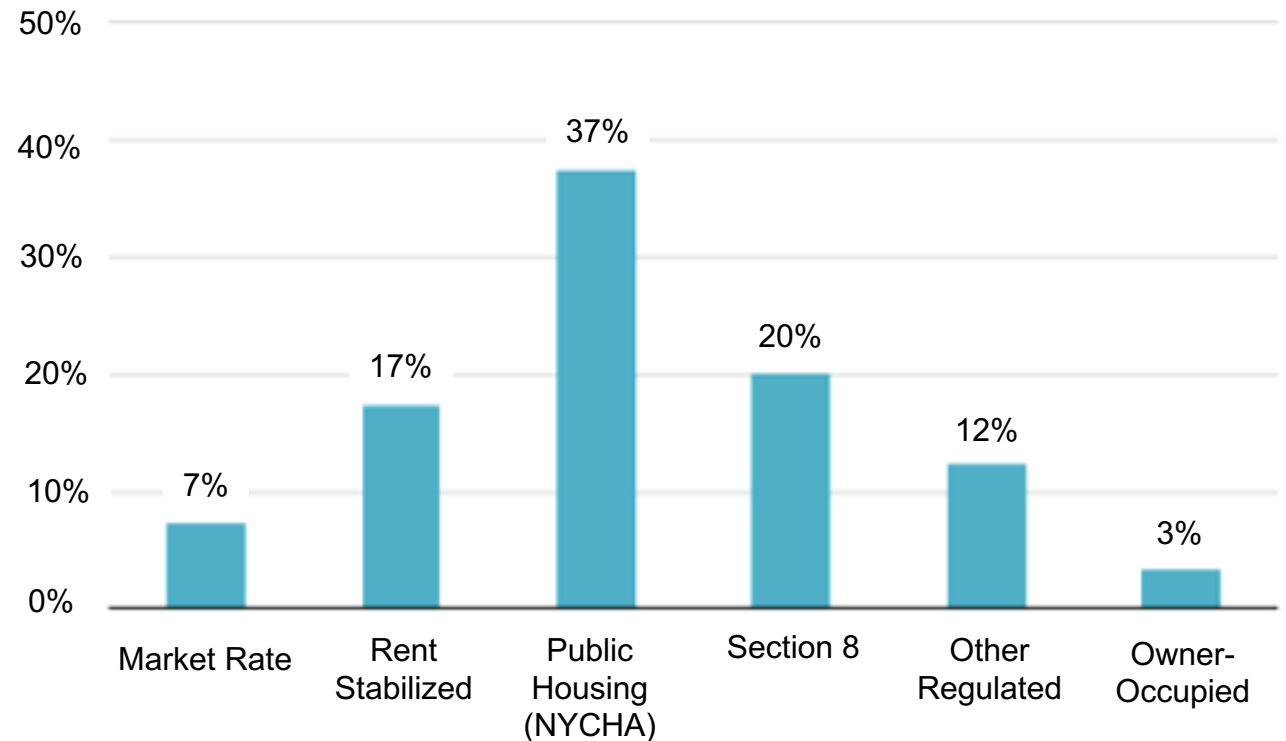### Prevalence of 3+ Maintenance Deficiencies by Housing Type in NYC

Housing Type	Prevalence
Market Rate	7%
Rent Stabilized	17%
Public Housing (NYCHA)	37%
Section 8	20%
Other Regulated	12%
Owner-Occupied	3%

Chart Source: NYC Housing and Vacancy Survey, 2017 vis U.S. Census Bureau and NYC Housing Department of Preservation and Development

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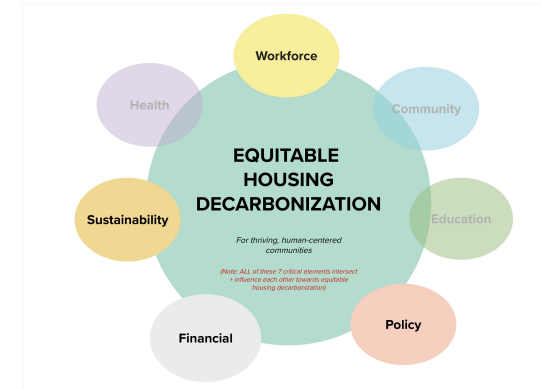
The Need for Existing Building Policy Requirements + Supportive Programs

Why Create Policies for Existing Buildings?

- **Buildings cause public health and safety hazards from air pollution, poor-quality construction, and maintenance deficiencies.**

- **Buildings contribute substantially to climate change, accounting for up to 70% of GHG emissions in some U.S. cities.**

- **The current pace of energy improvements in U.S. buildings is inadequate to reach climate goals.** Less than 0.3% of multifamily buildings are upgraded annually.*

*Source: Analysis by Arichitecture2030 using data from the International Energy Agency

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Potential Policy Requirements + Approaches

For Building Owners:

- Building Performance Standards (BPS)

- Replacement on Burnout Requirement

- Date-certain Equipment Phase-out

- Appliance Emissions Standards

- Rental Efficiency Standards

- Point of Sale Requirements

Potential Utility-Scale Approaches:

- Electrification Targets

- Strategic Gas Decommissioning

- Utility Scale Geothermal

*Source: Analysis by Arichitecture2030 using data from the International Energy Agency

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Need for Supportive Programs

- **Public funding is necessary to ensure that retrofit costs are not borne by low-income communities and renters,** which could exacerbate housing affordability and equity concerns.

- **"One-Stop Shop" programs are needed to help building owners complete upgrades and identify funding and financing options.**

- **Electrification retrofits must be paired with energy efficiency, electric readiness, and health and safety retrofits** to holistically address building needs and ensure energy bill savings.
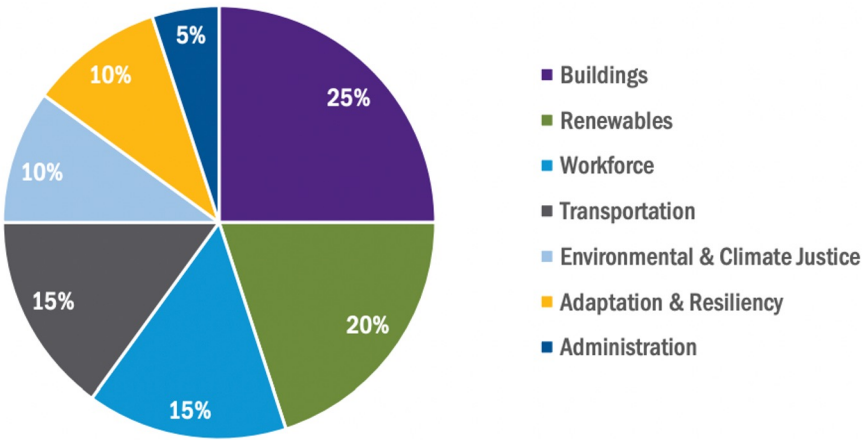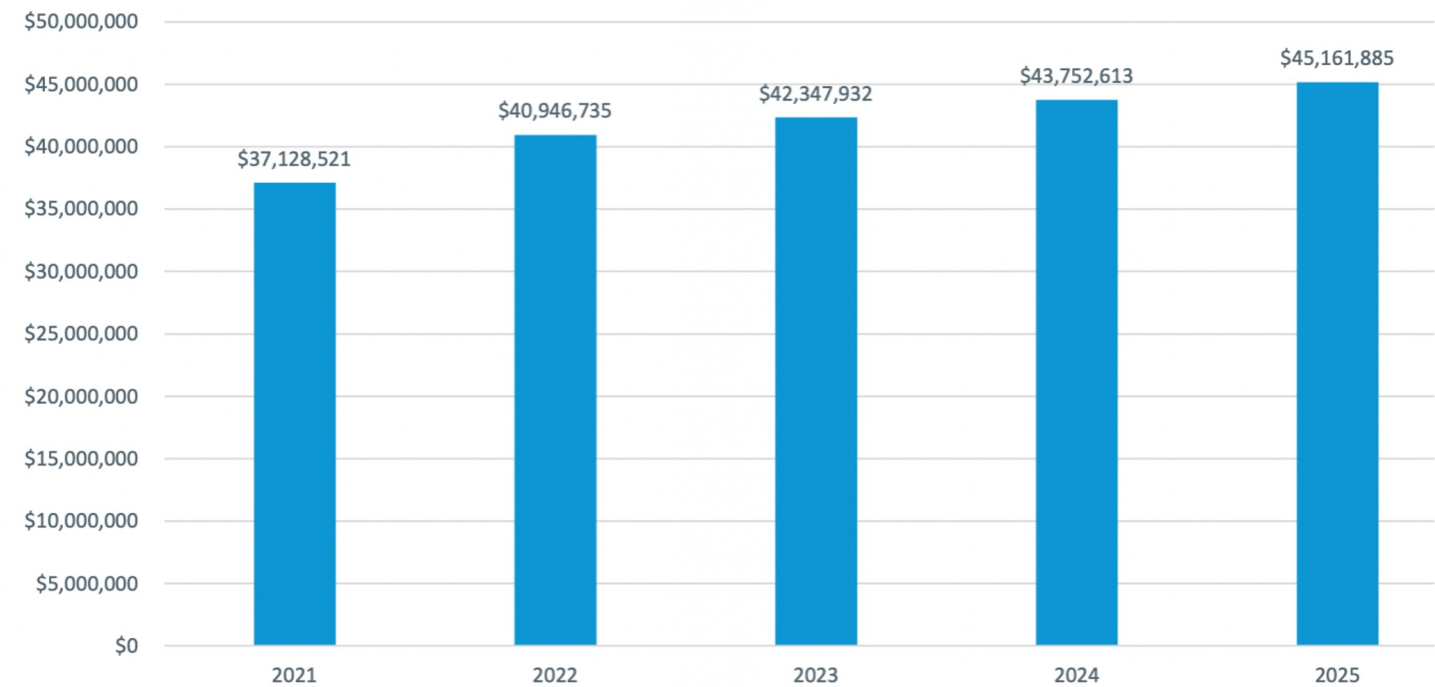
City Examples

Denver | Funding for Upgrades

Denver Climate Protection Fund

Generates $40-50 million annually, with a substantial portion of the funding for building electrification upgrades in under-resourced buildings.

Five-Year Estimated Expenditures by Allowable Use (% of Total)

- Buildings — 25%
- Renewables — 20%
- Workforce — 15%
- Transportation — 15%
- Environmental & Climate Justice — 10%
- Adaptation & Resiliency — 10%
- Administration — 5%

CPF Revenue Projection

Year	Revenue
2021	$37,128,521
2022	$40,946,735
2023	$42,347,932
2024	$43,752,613
2025	$45,161,885

Images Source: Denver CPF Five-Year Plan

New York City | Technical Assistance

Financial & Technical Assistance

Plan, finance, and complete building energy efficiency and renewable energy projects

Connect with Contractors

Find experienced and qualified contractors in your area

Understanding Local Laws

Assist building owners and operators to meet LL97 targets and other NYC laws

Access Incentives

Find incentive awards from local utilities and New York State to help you save costs

Trainings

Join an online training to improve your skills or learn something new

Build High Performance

Prepare for the future by building your next project to a High Performance standard

Images Source: NYC Accelerator