

# Achieving Employment, Equity, and Emissions Reductions through Building Decarbonization

California's building stock is undergoing a decarbonization transformation and Los Angeles needs to be at the forefront. Building decarbonization is not only vital to achieving climate goals, it also improves health and safety and can lower energy bills. If done thoughtfully, investing in building upgrades can jointly deliver equity, economic, and climate benefits for Los Angeles residents.

## Equitable Implementation

Low-income renters, vulnerable businesses, and others must be able to benefit from decarbonization, rather than being left behind. Los Angeles has the opportunity to design policies and programs that not only create good jobs, but also improve public health, reduce energy burden, and support housing preservation and stabilization. Below are program and policy recommendations to ensure that decarbonization advances equity and justice.

- New jobs created by decarbonization aren't guaranteed to be high quality, particularly in the private construction market, so **adopt labor standards including skilled and trained workforce and apprenticeship standards.**
- **Protect displaced good-paying union jobs associated with gas infrastructure** through programs like dual piping codes, VRF systems, or district energy.
- **Include targeted hire and supplier diversity metrics** in any publicly funded program and **support pre-apprenticeship programs and capacity building** for specific populations, to ensure new jobs are accessible to disadvantaged workers and small women-owned and minority-owned businesses.
- **Utilize public financing** to accelerate decarbonization of affordable housing, such as funding streams like Measures HHH, JJJ, and M, and state programs like CAMR, LIWP and SOMAH, so that the high upfront costs of building retrofits and appliances don't strand low-income consumers.
- Housing health and safety can be more urgent than reducing emissions, so **create a 'one-stop-shop' for whole home upgrades** to address all aspects of building resilience.
- **Tie financing to restrictions on rent increases, property sales, and eviction protections** for a specified time, as well as proactively preserving and expanding affordable housing, so that landlords cannot seek to recoup investments in building improvements with higher rents, potentially displacing tenants.
- Less use of natural gas will increase gas rates for remaining gas customers, which would exacerbate energy burden for low-income customers. To avoid this, **offer affordable rate design and increased bill support for energy-burdened customers**, such as level pay plans, budget billing, and flexible deferred payment plans, while avoiding using public resources to subsidize wealthy property owners.

## Job Growth

Well-designed building decarbonization programs can create well-paying, stable jobs. We modeled that the most ambitious efficiency and electrification programs could create about **18,000 new, full-time jobs for 29 years**. New opportunities in building efficiency and electrification would outnumber jobs lost in the natural gas sector.

Table: Summary Building Decarbonization Careers (2021–2050) (Deep Efficiency + Electrification)

	Deep Energy Efficiency*	Whole Building Electrification**	Total Decarbonization
<b>Careers (Small residential and Small Commercial, Except Schools)</b>	6,360 - 9,760	3,150 - 4,200	11,000 - 15,600
Total Investment Cost	\$37.1 - 55.2B	\$26.5 - 35.4B	\$63.6 - 90.7B
<b>Careers (Large Buildings + Schools, Universities, Hospitals)</b>	1,100 - 1,470	700 - 940	1,750 - 2,340
Total Investment Cost	\$9.9 - 13.1B	\$4.9 - 6.7B	\$14.8 - 19.8B
<b>Total Careers Supported (2021-2050)</b>	7,460 - 11,230	3,850 - 5,130	12,750 - 17,940
Total Investment Cost	\$47.0 - 68.4B	\$31.5 - 42.1B	\$78.4 - 110.5B

\*Assumes that no EE happens without policy or program.

\*\*Assumes that 35 percent of buildings require electric panel and service upgrades.

## Illustrative Solutions

While it is clear that building decarbonization could support jobs for tens of thousands of LA residents, the public and private sector investment required to realize this potential is significant. The examples below illustrate the job impacts from smaller and more targeted investments and regulations.

- An \$80M annual investment for 5 years could fully decarbonize and upgrade all of LA’s public schools, supporting 400–500 full-time equivalent (FTE) union construction jobs per year, improving the quality and safety of school HVAC systems and redirecting energy spending to learning. Measure RR allocates \$3 billion to retrofits and upgrades, providing a funding source to support this work.
- A robust incentive fund for deep decarbonization of LA’s affordable housing over 10 years could create 4600–7400 FTE union construction jobs per year, securing affordable housing, improving indoor air quality, and reducing energy burdens for low-income renters, while ensuring that low-income residents are not left behind.
- The City can target specific neighborhoods where there is a high incidence of methane leaks from the gas system and an aging building stock. By electrifying entire neighborhoods, it may be possible to “prune” the gas system, thus reducing the fixed costs associated with maintaining it. The workforce benefits of an aggregated neighborhood approach include the potential to adopt targeted hire standards and coordinate with apprenticeship and pre-apprenticeship programs to make the work opportunities accessible to city residents facing barriers to career-track jobs.