

# Building Opportunity: Chicago

## The Economic Benefits of Advancing Clean Building Policies in the Windy City



Chicago is home to more than 12,000 workers engaged in work directly related to making Chicago's building sector cleaner and more efficient.

This workforce includes workers who replace old insulation in the attics of single-family homes, fit new pipes for geothermal heating and cooling systems in commercial buildings, and install electric stoves and air source heat pumps in homes and buildings.

To better understand how electrifying and making Chicago's buildings more energy efficient would impact the city's labor market, E2 took a deeper dive into Chicago's overall clean buildings employment data.

### Total Building-Related Employment

In both Chicago and Illinois, energy efficiency and electrification of buildings employs at least **2 times as many workers** than fossil fuels in buildings.



### Clean Building Employment in Chicago by Sector

Clean buildings jobs include electrification (transition to electric heating and cooling), building envelope (updating doors, windows, insulation) and other building efficiency (other appliance upgrades).

Envelope: **1,906**



Electrification: **9,730**

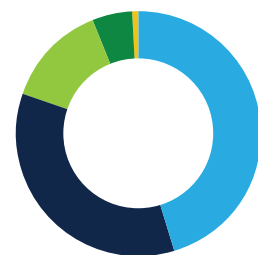


Other Building Efficiency: **1,087**



### Chicago Clean Building Jobs by Value Chain

The transition to clean buildings in Chicago will impact all parts of the economy. Of the 12,000 clean building jobs in Chicago the majority are in professional services and construction.



Professional Services: **5,769**

Construction: **4,459**

Manufacturing: **1,726**

Wholesale Trade: **664**

Other Services: **104**

This analysis of the United States Energy and Employment Report (USEER) was produced by BW Research for E2. The USEER survey includes workers who spend a plurality of their time working to improve the energy efficiency of a building, factory, residence, etc., without regard to the type of energy source used—including those workers who may still be installing high-efficiency gas technologies. As buildings transition from gas to all-electric these jobs will transition with them, as the skills required for both technologies are highly transferable.

## Worker Profile: Erik Eticity



My grandfather, a retired electrician from IBEW, is the reason I enrolled in Coyne College's electrical program and then took a job at Verde Energy Efficiency Experts as an electrical installer. Each day I travel from my home in Portage Park to do electrical jobs across Chicagoland. In my 6 years as an electrician, I've provided lighting upgrades to thousands of buildings to help building owners save money and energy. Recently, I have been learning new skills to install a brand new, all-electric HVAC system at the Oak Park Temple school and community hall. These upgrades make the building more comfortable and improve air quality.

At a company like Verde that does electrical work, the transition to all-electric buildings is an opportunity for growth and job creation. From my vantage point, there is huge potential to electrify churches, schools, and hospitals that are still running on gas and water-cooled compressors. Companies like mine are ready to hire more electricians like me to do the work.

## Occupation Spotlight: Job Descriptions and Data on Wages, Education, Benefits

While jobs in building efficiency and electrification vary, this section provides descriptions of five of the top occupations in Chicago involved in building efficiency and electrification, including:

- // **Heating, Air Conditioning and Refrigeration Mechanics and Installers** install, service or repair heating and air conditioning systems in buildings.
- // **Construction Laborers** do the physical labor required to retrofit and rebuild Chicago's aging building infrastructure.
- // **Electricians** install efficient appliances, ensure a building's grid-readiness and install vehicle charging infrastructure.
- // **Insulation Workers** line and cover floors, ceilings and walls with insulating materials to reduce a building's overall energy use for heating and cooling.

We examined the average pay, education, and benefits of the five occupations listed.

- // **Pay:** In 2020, average annual wages for five occupations within building electrification in Chicago ranged from \$57,700 (for mechanics and installers of heating, air conditioning, and refrigeration equipment) to \$83,100 (electricians).
- // **Education:** Of the jobs listed, the average worker enters the field after high school, suggesting these jobs offer strong on-the-job training opportunities and are accessible to many people throughout Chicago.
- // **Benefits:** At least 4 in 5 employers indicated that they pay at least some of the health insurance costs for employees in each of the five occupations listed, while at least 7 in 10 employers provide retirement contributions for those occupations at their firms.

## POLICIES MATTER

Policies that support electrifying and making Chicago's buildings more energy efficient can create job opportunities and result in substantial economic and climate benefits for Chicago residents. With the Inflation Reduction Act incentives creating an unprecedented opportunity for cities, states, and customers to advance clean energy and building retrofits, the time to act is now. The City of Chicago must pass the following by early 2023:

- // **Carbon Emissions Standard for New Construction:** Adopt the proposed *Clean Buildings, Clean Air* ordinance that sets a carbon emissions standard to prohibit fossil fuel powered appliances in new commercial and residential construction and gut renovations of existing buildings. The ordinance phases in requirements starting with lower-rise buildings in mid-2024 and for taller buildings by end of 2024 and includes exceptions for select uses like industrial processes, hospitals, and commercial cooking.

