

Illinois: Home to 123,247 Clean Energy Jobs

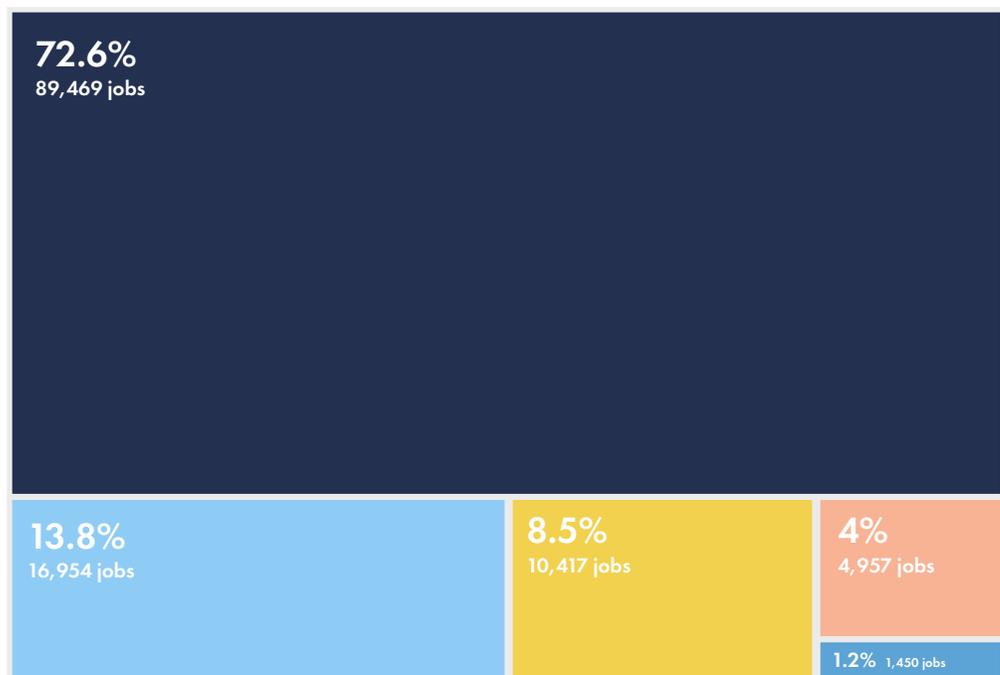
CLEAN ENERGY EMPLOYMENT IN ILLINOIS KEEPS EXPANDING

Clean energy is a major employer in Illinois with 123,247 jobs, the second-highest total in the entire region.¹ In 2018, the Illinois clean energy industry added 4,717 jobs. That's a 4 percent growth rate, and it's right in line with the regional average. Illinois has more jobs in energy efficiency, renewable energy, clean fuels, and advanced grid than any other state in the Midwest. The alternative transportation sector experienced the most year-over-year growth, spiking nearly 26 percent. Energy efficiency jobs continue to be the largest Illinois clean energy employer; the sector is home to nearly three out of every four of the state's clean energy jobs. In any given year, hundreds of different Illinois companies and establishments hire clean energy workers. Combined, these employers anticipate an 8.5 percent growth rate in hiring in 2019.

SECTOR BREAKDOWN

Fig. 1:
Clean Energy Technology
Sectors, 2018

- Energy Efficiency
- Renewable Energy Generation
- Advanced Transportation
- Advanced Grid
- Clean Fuels



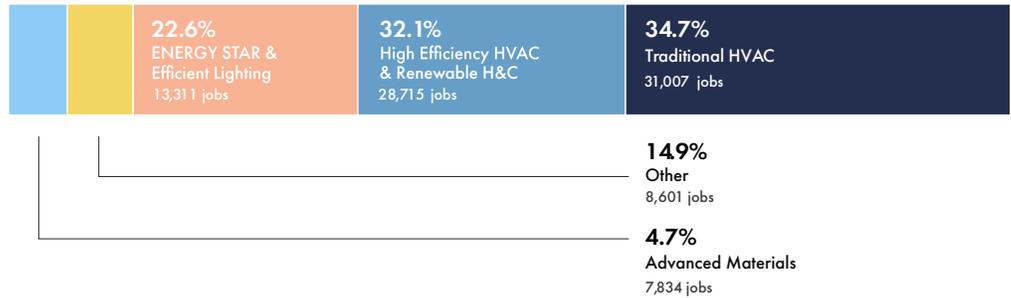
1. Unless otherwise stated, all data is based on the 2019 USEER. Energy Futures Initiative. (2019). The U.S. Energy Employment Report. Washington, DC. www.usenergyjobs.org. The Data provided relies on thousands of data points provided via survey. EFI, NASEO and BWRP have made every effort to supply current and accurate information but assume no responsibility or liability for any decisions based upon the information presented. For more information on the survey methodology see cleanjobsmidwest.com/about.

ENERGY EFFICIENCY A SIGNIFICANT ILLINOIS EMPLOYER

89,469 Illinoisans work in energy efficiency, by far more than any other sector in the state’s expansive clean energy industry and more than any other state in the entire Midwest. In 2018, Illinois energy efficiency businesses created 2,553 new jobs, a 2.9 percent growth rate.

Energy efficiency workers are active throughout the value chain. They manufacture ENERGY STAR-rated kitchen appliances; install efficient lighting systems at car dealerships; implement software that optimizes traditional heating, ventilation and air conditioning (HVAC) systems in high schools, and handle advanced building materials at new office towers.

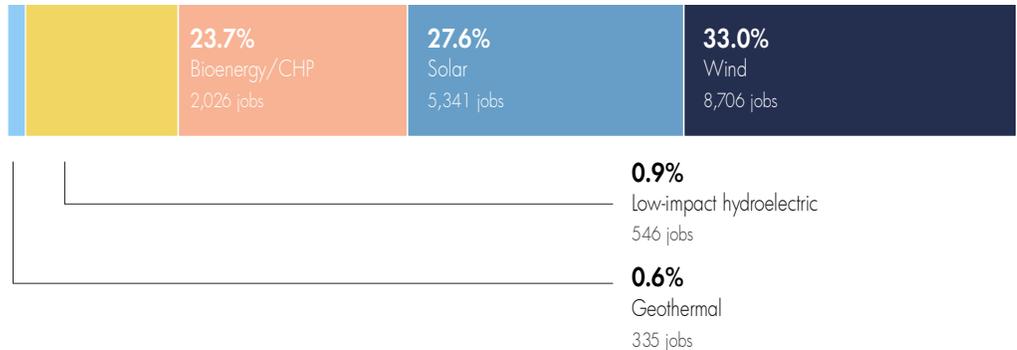
Fig. 2:
Energy Efficiency Subsectors,
2018



RENEWABLE ENERGY JOB GAINS POWERED BY WIND, SOLAR

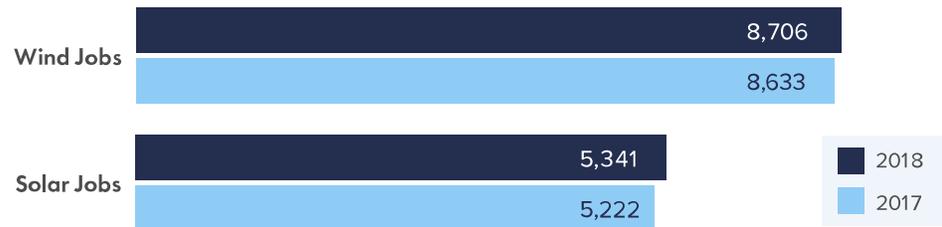
The second-largest employer in the state’s clean energy industry is renewable energy generation with 16,956 workers. Wind (8,706 jobs) and solar (5,341) are the two largest employers in the sector.

Fig. 3:
Renewable Energy Subsectors,
2018



Illinois’ 2-percent growth in solar jobs is in contrast to what was happening in the sector nationwide, with American solar jobs dropping about 4 percent overall. While wind and geothermal jobs in Illinois also grew, bioenergy and low-impact hydro experienced job declines.

Fig. 4:
Wind and Solar Jobs, 2018 and
2017 Comparison



ADVANCED TRANSPORTATION JOBS SURGE

Advanced transportation is the No. 3 clean energy employer in Illinois with 10,417 jobs. Following job losses in 2017, the sector grew 25.9 percent in 2018, a gain of 2,144 jobs in a single year. Sector employment growth was fueled by jobs building and developing plug-in hybrid vehicles, EVs and hybrid electric vehicles. 2,174 people now work on plug-ins in Illinois -- that's 41 percent more than in 2017. Electric vehicle and hybrid electric vehicles jobs almost boomed, with both sub-sectors experiencing double-digit growth rates.

ENERGY STORAGE LEADS THE ADVANCED GRID SECTOR

Advanced grid jobs employ 4,957 Illinoisans. These jobs grew 1.4 percent from 2017. Energy storage is the sector's largest employer with nearly 2,080 jobs, about 50 more than 2017. As the fourth-largest clean energy employer in the Midwest, the sector includes jobs in energy storage, smart grid, microgrid, and other grid modernization work.

CLEAN FUELS JOBS DROP

About 1,450 Illinoisans work in clean fuel jobs. This is 3.2 percent fewer than 2017, a drop of about 50 jobs. The clean fuels sector encompasses non-corn ethanol, non-woody biomass and other technologies not yet in wide commercial production, including algal biofuel, syngas, bioheat blends, landfill gas, and advanced biofuels.

Fig. 5:
Top 3 MSAs in Clean Energy
Employment, 2018

| Metro Area (MSA) | Total Clean Energy Employment | Renewable Energy Employment | Energy Efficiency Employment |
|---|-------------------------------|-----------------------------|------------------------------|
| Chicago-Naperville-Joliet, IL-IN-WI MSA | 86,967 | 12,467 | 62,708 |
| St. Louis, MO-IL MSA | 6,119 | 838 | 4,456 |
| Peoria, IL MSA | 3,562 | 411 | 2,652 |

CLEAN ENERGY INDUSTRY OUTLOOK

CLEAN ENERGY JOBS GROWING FASTER THAN ILLINOIS JOBS OVERALL

Signed by former Gov. Bruce Rauner in December 2016, the Future Energy Jobs Act (FEJA) put Illinois on track to acquire a quarter of its electricity from renewable energy by 2025. Notable from a jobs perspective, the law also strengthened the state's energy efficiency standards.

Since FEJA was enacted, Illinois has experienced sustained job growth in the major clean energy sectors of wind, solar, and energy efficiency. In fact, in 2018 Illinois added more energy efficiency jobs than any other state in the region.

In part due to a confluence of business friendly energy policies like FEJA and ongoing clean energy industry expansion, Illinois clean energy jobs are growing significantly faster than jobs in the state's overall economy. Whereas the overall Illinois job market grew 2.4 percent in 2018, clean energy jobs grew at a much quicker pace -- about 4 percent.²

One sector where Illinois clean energy jobs increased dramatically was advanced transportation. Likely a major factor in this dynamic was an upswing in popularity of EVs, which experienced an in-state sales increase of about 80 percent. The subsequent impact on the local labor market was not surprising: alternative transportation jobs in Illinois surged to a 26 percent year-over-year increase. Making this latest round of advanced transportation job growth all the more striking is that jobs in the sector in Illinois had actually dropped in 2017.

Looking ahead, clean energy job growth in Illinois is expected to continue. Clean energy employers project an 8.5 percent growth in jobs in 2019.

COMPARING CLEAN ENERGY JOBS TO FOSSIL FUEL JOBS

In 2018, only 33,970 Illinoisans worked in fossil fuel energy jobs in industries like coal, natural gas, and oil.³ In the coal industry, jobs fell 7 percent in part due to increased automation in the industry and low natural gas prices.

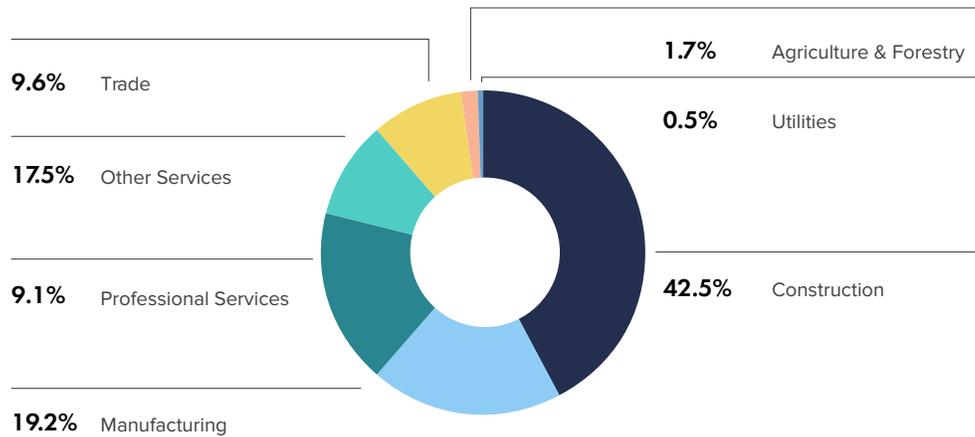
2. U.S. Bureau of Labor Statistics Local Area Unemployment Statistics, 2018 Preliminary data

3. 2019 US Energy and Employment Report. This figure does not include gas station workers.

VALUE CHAIN

In addition to breaking down clean energy jobs by sector, jobs can also be categorized by their function in the value chain. This report divides the clean energy jobs value chain into the following categories: agriculture, utility, construction, manufacturing, trade, professional service, and other service jobs. Each value chain category captures jobs from multiple clean energy sectors and sub-sectors.

Fig. 6:
Clean Energy Jobs Value
Chain, 2018



When Illinois clean energy jobs are broken down by their placement in the value chain, construction is home to 42.5 percent of the jobs while manufacturing is home to 19.2 percent.

DEMOGRAPHICS

Throughout the state, 10 percent of the state's clean energy workers are veterans. By comparison, veterans make up 6 percent of the national labor force. The large ratio of veterans transitioning to clean energy jobs is the result of the U.S. Department of Defense's long-standing commitment to investing in renewable energy, energy efficiency and training programs that prepare veterans for private-sector employment in industries like solar.

Small businesses drive the state's clean energy sector – three out of every four Illinois clean energy businesses employ fewer than 20 individuals.

4. 2018 Bureau of Labor Statistics Current Population Survey (CPS)

SUMMARY

Clean energy employment opportunities in Illinois encompass dozens of sectors and sub-sectors and include diverse roles along multiple value chains. The state ranks a close second to Michigan in the overall number of clean energy jobs, and it's the top state in the region for jobs in major sectors like energy efficiency and renewable energy. Advanced transportation jobs significantly rebounded from a drop in 2017, with electric, hybrid and plug-in hybrid vehicles leading the way. Meanwhile, solar jobs increased even as the sub-sector faced job losses in the U.S. overall. With 4 percent clean energy industry job growth year-over-year, people in Illinois can anticipate clean energy to continue playing a significant role in the state's economy, with additional job opportunities being created in manufacturing, advanced transportation, renewable energy and other sectors and industries.

The data and analyses presented in this report by Clean Energy Trust and Environmental Entrepreneurs are based on data collected for the 2019 U.S. Energy Employment Report (2019 USEER), produced by the Energy Futures Initiative (EFI) in partnership with the National Association of State Energy Officials (NASEO) and collected and analyzed by BW Research Partnership (BWRP).

4. 2018 Bureau of Labor Statistics Current Population Survey (CPS)

2019 CLEAN JOBS MIDWEST

