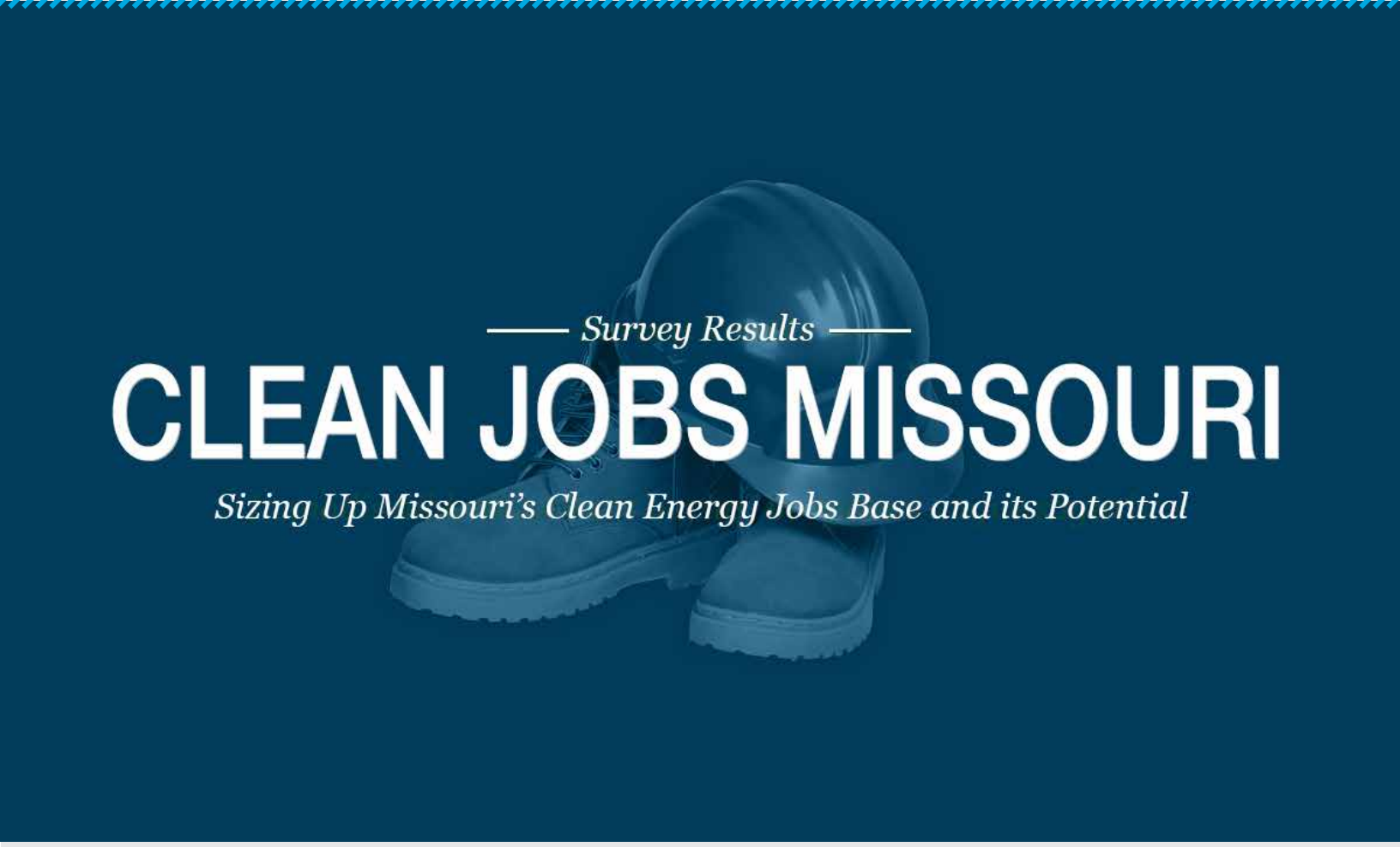


Survey Results

CLEAN JOBS MISSOURI

Sizing Up Missouri's Clean Energy Jobs Base and its Potential

Presented by

Environmental Entrepreneurs

Missouri Energy Initiative
Leadership for our energy future

APRIL 2015

ABOUT THE PARTNERS

Environmental Entrepreneurs (E2) is a national, nonpartisan group of business leaders, investors and others who promote smart environmental policies that drive economic growth. E2 members, active in nearly every state in the country, have built or financed more than 1,700 companies that have created more than 570,000 jobs, and manage more than $100 billion in venture and private equity capital. E2 is an affiliate of the Natural Resources Defense Council (NRDC).

Missouri Energy Initiative (MEI) is a nonprofit association of public and private-sector entities, united together with the sole purpose of enhancing and improving energy-related activities in Missouri. The Initiative is broadly focused on working with the general public, institutions of higher education, other nonprofit organizations, private sector entities, non-governmental organizations and associations, and others interested in the stability and growth of the state's energy sector.

ABOUT THE RESEARCH AND ANALYSIS PARTNERS

BW Research Partnership

BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive clean energy research studies, including the National Solar Census, wind industry analyses for the National Renewable Energy Laboratory and the Natural Resources Defense Council, and state-level clean energy reports for Massachusetts, Illinois, Vermont, Iowa, and Missouri, among others.

The Economic Advancement Research Institute (EARI)

The Economic Advancement Research Institute (EARI) is a nonprofit research organization focused on economic mobility and regional competitiveness. EARI is primarily focused on studying the impact of policies and systems on economic growth and prosperity across all income levels. EARI has conducted numerous labor market analyses that address key economic sectors with high probability to provide opportunities to underrepresented and disadvantaged populations.

A LETTER FROM THE PARTNERS

The Midwest is leading the charge in developing a strong American clean energy economy. Iowa has taken the lead in renewable generation, meeting 27% of its electricity needs with wind power.[1] Michigan and Ohio have tapped local manufacturing expertise to lead production of America's advanced vehicles, solar panels, and other clean energy technologies.[2] [3] With its growing efficiency and solar sectors and significant wind energy potential, Missouri has a tremendous capacity to create its own robust clean energy and transportation economy: spurring jobs, cutting energy bills, and playing a critical role in this rapidly growing national industry.[4] [5] [6]

We collected data from Missouri employers to better understand the employment impacts of existing clean energy and transportation growth and the policies supporting it in the state. As detailed in the report to follow, we found that the state's clean energy and transportation industry already employs nearly 40,000 workers at over 4,400 business establishments.[i] From technicians that are installing and maintaining solar panel systems, wind farms, and energy-saving technologies in buildings to scientists and engineers developing the next wave of clean technologies, these workers are helping Missouri to forge a new chapter of clean energy progress.

The state's energy policies and programs are helping to expand clean energy markets, facilitating industry and job growth. In 2012, the state's utilities launched energy efficiency programs which are already reporting impressive early results. Ameren Missouri's programs saved enough energy in 2013 to power 25,000 homes for a year, and provided $3.61 in long-term savings for homeowners and businesses for every $1 invested.[7] Kansas City Power and Light (KCP&L) has doubled its efforts to reduce energy use among its customers and plans to save enough energy to power 20,000 homes through 2015.[8] These programs are a strong step in the right direction for utilities delivering benefits from cost-effective energy efficiency, and they are preparing to do more. [9]

The state has also been expanding its renewable energy resources since voters replaced the state's voluntary renewable energy standard with a mandatory standard in 2008 that requires 15 percent renewable energy and energy efficiency by 2021. Six wind farms are in operation in the Northwest region of the state and more than a third of the state's solar energy capacity, totaling 78 MW or enough electricity to power over 8,000 homes, was installed in 2013.[10] [11] More projects are being announced every day, such as Ameren Missouri's 19,000-panel, 5.7 MW solar facility in O'Fallon, the 100 MW Hawthorne Wind Farm and the 49 MW High Prairie Wind Energy Project.[12] [13]

Cities like Kansas City, Missouri are also stepping up to the plate, taking on major initiatives to help building owners and tenants use energy smarter. In 2013, Kansas City joined with nine other cities to participate in a new, exciting initiative called the City Energy Project, which supports solutions that cut energy waste in large buildings, boost local economic development and job creation, and reduce pollution.[14]

[i] The Bureau of Labor Statistics defines an establishment as the physical location of a certain economic activity, such as a store, office, or manufacturing facility. An establishment generally produces a single good or provides a single service. An enterprise (a private business, government, or nonprofit organization) can consist of a single establishment or multiple establishments.

At the same time, the state is at a crossroads. Missouri utilities are diversifying away from their current demand on coal, which currently generates 83 percent of the state's electricity.[15] [16] [17] As it diversifies its portfolio, the state's local 275,000 MW of wind power potential, including many potential wind sites in close proximity to Kansas City, is an attractive, undeveloped resource.[18] Solar energy rebates also dried up in 2013, due to meeting the 1% cost cap mandated by Missouri's renewable energy standard. This forced some solar companies responding to our survey to report they're considering a shift to more secure business in the energy efficiency industry.[19] [20]

There's great opportunity to take advantage of the changing energy landscape and Missouri's growing clean energy and transportation industry is primed to help propel the state to a more diverse economy and energy and transportation portfolio. Companies like Schneider Electric and SunEdison, as well as the companies and workers profiled in this report, provide just a few examples of how the state's 40,000 strong clean energy workforce are advancing new energy options in every part of the state, from energy efficiency building retrofits to solar power systems. The result is not only more jobs and investments in the state, but a healthier future and economic growth for generations to come.

Bob Keefe
Executive Director, E2

Josh Campbell
Executive Director, MEI

EXECUTIVE SUMMARY

Missouri's clean energy and transportation industry, encompassing renewable energy, energy efficiency, advanced transportation[ii], and greenhouse gas emissions management and accounting, accounts for nearly 40,000 workers at more than 4,400 establishments. This number is roughly double Iowa's clean energy and transportation workforce, but less than half the workers in Illinois and Massachusetts, suggesting room for growth.[iii]

The energy efficiency sector employs 32,576 clean energy workers, which is 83% of all clean energy jobs in Missouri. Renewable energy firms account for 15% of clean energy employment, or 6,050 workers—3,715 of whom are solar employees.

Missouri's clean energy economy experienced a 4.8% employment growth, creating 2,000 additional jobs, between 2013 and 2014. Most new positions in the last 12 months have been technician and production workers, concentrated in the installation and manufacturing sector. Firms also remain confident about future growth projections, with 37.6% of businesses expecting to add 3,000 new clean energy workers in the next 12 months (a growth of 7.1%). While there's always room for improvement in diversity, the sector has recently experienced increased diversity; 25% of new hires in the last 12 months were women, 39.3% were ethnic minorities, and 13.6% were veterans.

About 75% of Missouri's clean energy and transportation workforce, or 29,739 workers, spend a majority of their time supporting clean energy activities related to renewable energy, energy efficiency, advanced transportation, and greenhouse gas emissions management and accounting, while 57% spend all of their time on those types of activities.

Missouri's clean energy and transportation sector is locally focused, with 70.2% reporting primarily in-state customers and 44.2% supporting in-state vendors. Clean energy and transportation is the predominant source of revenue for roughly 40% of businesses, while 48% earn more than half of their revenue from other sources. Sales and installation represent the main sector in the state, accounting for 54.2% of businesses. Firms are located across the state with 37% located in the St. Louis Metropolitan Area and 22% located in the Kansas City Metropolitan Area.

With 9.4% of the clean energy workforce (3,700 workers) expected to retire in the next five years, many firms reported difficulty in hiring new employees. Thirty-eight percent report some difficulty in hiring, while 22.5% reported great difficulty. Of the employers who reported difficulty hiring, a majority (51.2%) stated that the primary reason for the difficulty is related to applicant complications, including that they need additional training, certification, or do not have requisite skills to match their wage demands.

About 25% of businesses believe the greatest barrier to clean energy is the current high cost to adoption, 23.3%

[ii] Alternative transportation includes electric vehicles and electric rail.

[iii] See Massachusetts Clean Energy Industry Report, September 2014, Massachusetts Clean Energy Center; Illinois Clean Energy Jobs Study, March 2014, Clean Energy Trust.

reported high taxes and lack of incentives as a problem while 19.4% referenced lack of government action, regulations, or policies. Many employers cited that more government support would aid continued growth in the state's clean energy sector; 39% believe more financial incentives are needed and 12% specifically mentioned the need for an expanded solar rebate program. While greater government support and policy certainty can play a significant role in driving the growth of clean energy markets, as exhibited in other states, market-driven solutions will also be essential to achieving a more diversified, cleaner energy portfolio.

METHODOLOGY

Industry Survey Methodology

The data in the report was derived from a comprehensive survey of business establishments in Missouri conducted between May 21, 2014 and June 4, 2014. Surveys were administered online and over the phone to a list of known employers as well as a representative, clustered sample of companies from the North American Industry Classification System (NAICS) identified by the Bureau of Labor Statistics (BLS), BW Research Partnership, and the Economic Advancement Research Institute as being potentially related to the clean energy industry. The research methodology employed for this report has been used increasingly as a tool for measuring clean energy industry jobs and businesses, including in California, Florida, Illinois, Iowa, Massachusetts, Vermont, and other states, as well as several national analyses.

For this study, the research team placed 14,642 telephone calls and sent 139 emails to employers. The combined margin of error for the survey effort was approximately +/- 3.60% at a 95% confidence interval. The survey yielded 708 responses from employers in Missouri and averaged 15 minutes in length.

Business Establishments Surveyed

The methodology employed for this report accounts for the different types of establishments that are engaged in clean energy activities. The first category of establishments (the "known universe") are drawn from publicly and privately available lists of companies, such as industry association memberships, lists of certified contractors, etc., that are typically pure-play clean energy companies, meaning that all or most of their revenues and work are associated with one or more clean energy activity. These establishments are surveyed using a census approach and each is contacted up to six times to complete a questionnaire.

Research has shown, however, that a large percentage of clean energy activity is found in traditional industries, such as component manufacturing and the construction trades (the "unknown universe"). As a result, an important part of the methodology of this report is to understand the percentage of companies and establishments within such traditional industries that are conducting clean energy activities, as well as determining the percentage of revenues and employment and the different types of activities related to clean energy that such establishments are conducting. Understanding the specific activities and amount of work generated by clean energy for each of these (often) different categories of companies is critical to gain a more comprehensive understanding of a region's clean energy economy.

"Known Universe"

The "known universe" includes firms previously identified by researchers as clean energy companies. The combined database was developed from previous work and databases from BW Research Partnership and the Economic Advancement Research Institute. This list was also supplemented with industry lists provided by partners to the research or that were publicly available. After combining records and duplicate cleaning, the "known universe" of firms included 766 businesses.

"Unknown Universe"

The "unknown universe" included firms not previously identified by researchers as clean energy companies. This database was drawn from the Bureau of Labor Statistics Green Jobs Initiative and the NAICS industries identified therein (see: http://www.bls.gov/green/home.htm), as well as businesses drawn from InfoUSA. The full list of NAICs industry codes that were surveyed is provided in Exhibit 1 of the Appendix to this report. 657 firms provided information as to whether they were involved in clean energy or not. The overall margin of error for the incidence rate analysis is estimated at approximately +/- 3.74% at a confidence level of 95%. Of the firms that provided information, 126 firms from the "unknown

universe" identified as clean energy and completed the full survey.

SECONDARY DATA SOURCES AND LIMITATIONS

Economic Modeling Specialists, International (EMSI) Data

EMSI industry data have various sources depending on the class of worker. (1) For Quarterly Census of Employment and Wages (QCEW) employees, EMSI primarily uses the QCEW, with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, Bureau of Economic Analysis (BEA) State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Non-employer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

CASE STUDY: ***Brightergy expands beyond Missouri, but stays true to its roots***

Brightergy was formed in October 2010 when energy entrepreneur Adam Blake purchased the assets of a small alternative energy business called The Energy Savings Store. By growing the company from just a few initial workers to the 80+ employees who make up Brightergy today, Blake has guided the company through a wave of extensive growth - including expansion into the Northeast, opening an office in Boston, and completion of more than 1,200 solar projects. As one of the country's largest solar providers, Brightergy launched a $100 million strategic alliance with Black & Veatch in 2013 to develop commercial solar PV systems in the greater Kansas City area and throughout the country.

Brightergy's initial growth in Missouri was largely fueled by the state's utility rebate program, passed into law by Proposition C in 2008. But in response to an uncertain incentive environment, the company has increased the diversity of its offerings. Blake describes his long-term vision of the company as a full-service energy provider specializing in providing insight into their clients' energy demand and utilizing that insight to identify opportunities to manage risk and control costs. The abrupt cancellation of the utility rebate program has been one of Brightergy's biggest challenges, but Blake expressed optimism about upcoming energy efficiency opportunities driven by the EPA Clean Power Plan - a policy he hopes will usher in a new era of market certainty.

Meanwhile, the company continues to grow, enabling businesses to benefit in a myriad of ways. "You see business owners act like little kids as their [solar] system comes online," said Rachel Simmons, Brand Communications Manager. "There's a feel-good aspect to it." Blake talks about a future "energy democracy" where building owners generate and manage energy at the distribution level through technology such as battery storage systems and demand management. And Brightergy has brought its work home in the meantime: one of the company's earliest projects was a 50 kilowatt solar PV array at Rockhurst High School, Blake's alma mater.

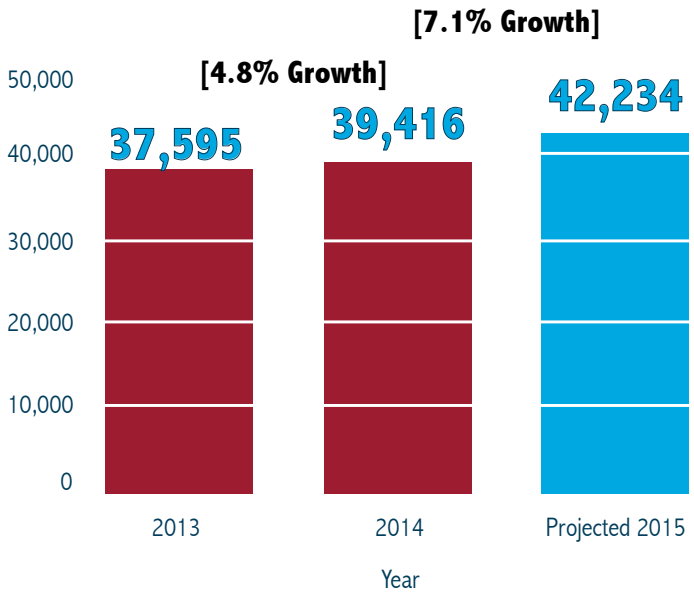
--Environmental Entrepreneurs

Brightergy employees install a solar canopy in Kansas City's West Bottoms district. (Photo courtesy of Brightergy)

MAJOR FINDINGS

A GROWING INDUSTRY

Clean energy employment is growing, adding nearly 2,000 jobs (4.8% growth) from 2013-2014. Employers expect hiring to pick up over the coming 12 months, with 37.6 of clean energy businesses projecting to add almost 3,000 new clean energy workers (7.1% growth).

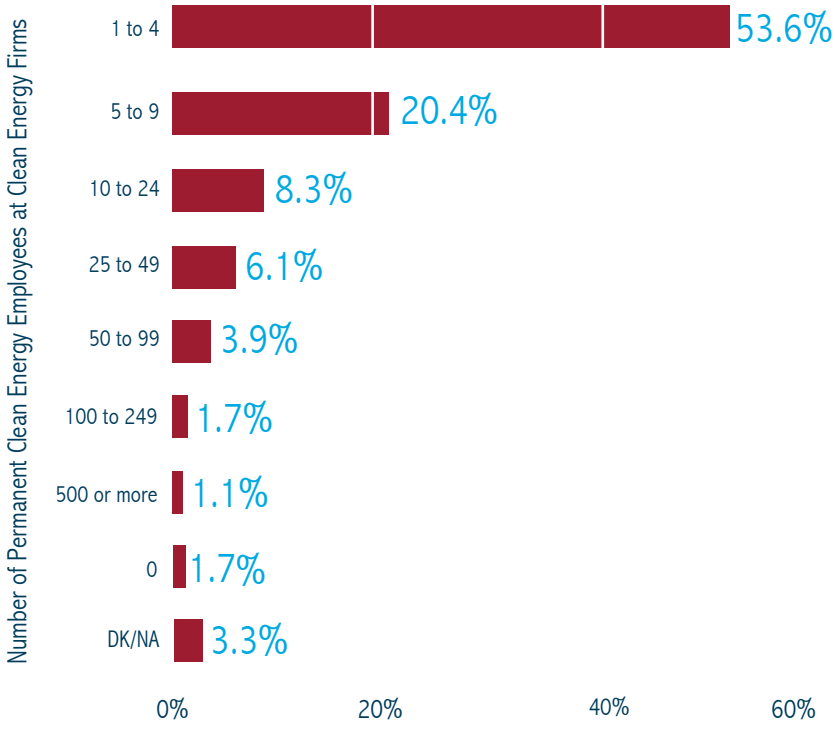


A WORKFORCE FOCUSED ON CLEAN ENERGY SUCCESS

About 75% of the clean energy workforce spends a majority of their time working with clean energy goods and services (29,739 workers). Approximately 57% of clean energy employees spend all of their time on clean energy work.

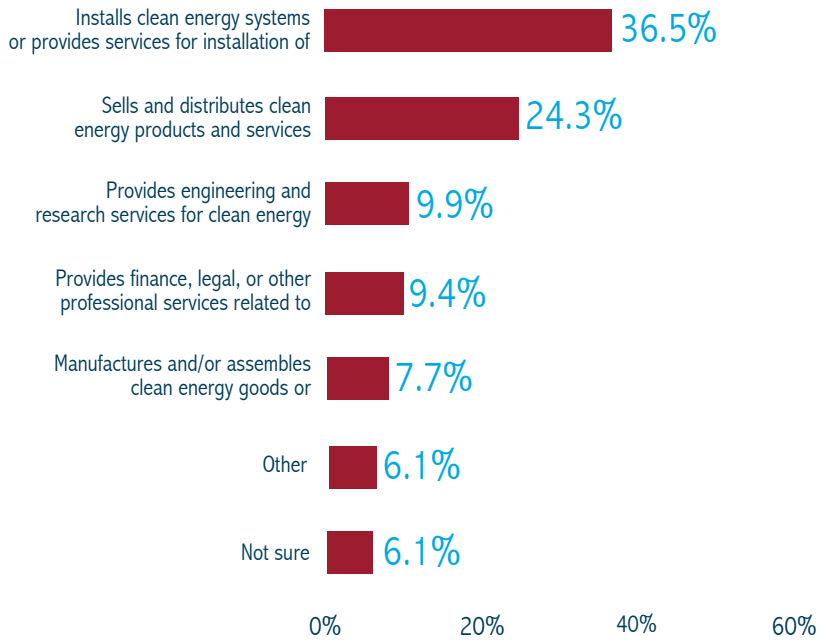
SMALL BUSINESSES LEADING THE WAY

Clean energy firms are mostly small businesses, with 55% having fewer than five clean energ y employees. About 90% have fewer than 50 clean energy employees.



WORK UP AND DOWN THE SUPPLY CHAIN

Installation and sales make up the majority of clean energy work in Missouri, representing 54.2% of all clean energy businesses.



CASE STUDY: ***What do a surgeon, a veteran and a coal miner all have in common? StraightUp Solar.***

When orthopedic surgeon Dane Glueck evaluated putting a solar array on his St. Louis rooftop in 2006, one of the first questions he researched was where to find certified solar installers. To Glueck's dismay, Missouri had no NABCEP-certified installers—a designation that's the industry's gold standard. In response, Glueck took matters into his own hands. He took the qualifying exam himself and became the state's first NABCEP installer. As Glueck installed the final panel on his own residential system, an interested neighbor began asking questions about the economics of residential solar and whether it made sense to put an array up on his own rooftop. Recognizing a business opportunity, StraightUp Solar was born.

StraightUps's workforce is full of compelling stories. Mike Hornitschek, the company's strategic development director, served for 23 years in the Air Force, ascending to the rank of Commander of the 375th Air Mobility Wing at Scott Air Force Base in Illinois, before recognizing the geopolitics of resource security was driving America's overseas military operations. "Once the energy epiphany seizes you, you can't unsee it," Hornitschek said. "The greatest risk to my kids having a quality of life greater than or equal to my own is energy insecurity. I feel like I'm on a mission in my second career to enable this, however I can."

Or see Matt Reuscher, an Illinois coal miner who was laid off in spring 2012 after a deep drought caused his local mine to scale back production. Now, Reuscher installs rooftop systems for StraightUp. "Back home, mining is what people do," Reuscher said. "The clean air, it took me a while to get used to," he chuckled, recalling his first workday on a roof. "All my friends are so passionate about mining … I'd love to see them make the same transition I have."

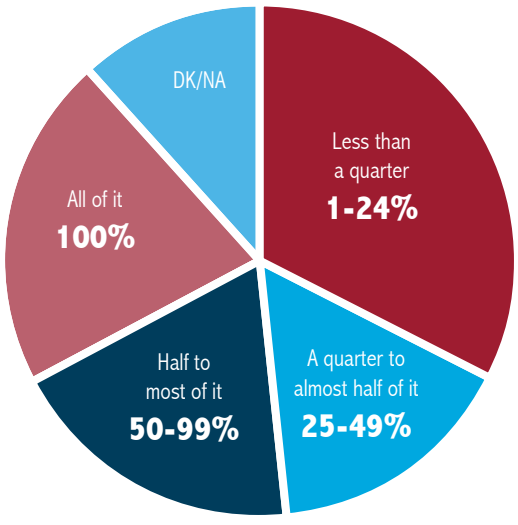
Like many Missouri-based solar companies, StraightUp faces challenges in the Missouri market since local utilities canceled the consumer rebate program. But StraightUp has responded by diversifying into a new efficient lighting product line and expanding operations into southern Illinois. StraightUp's employees are far from discouraged. "People are talking now about where the energy comes from and why that's important," said Erin Noble, director of staff. "The growth and maturation of the industry has been really exciting to see."

--Environmental Entrepreneurs

The solar array at Crossroads College Prep School in St. Louis was installed by StraightUp Solar. (Photo courtesy of StraightUp Solar)

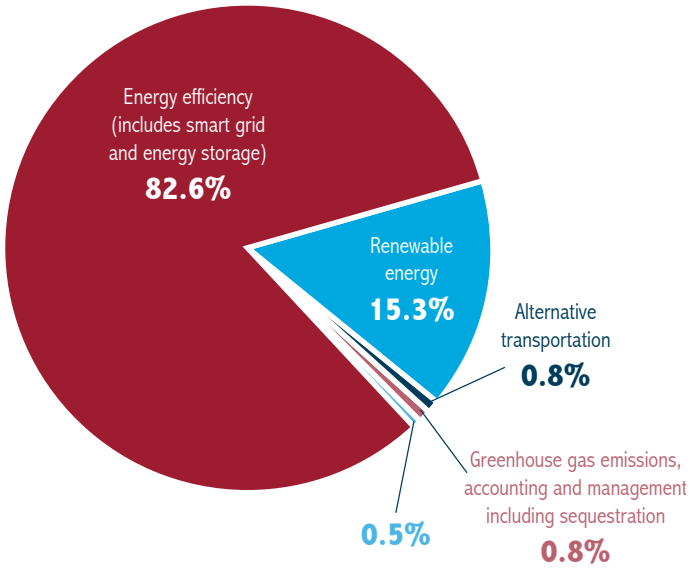
CLEAN ENERGY ORDERS BRINGING REVENUES

Clean energy is the predominant source of revenue for 39.8% of clean energy businesses, while 48% earn more than half of their revenue from other sources.

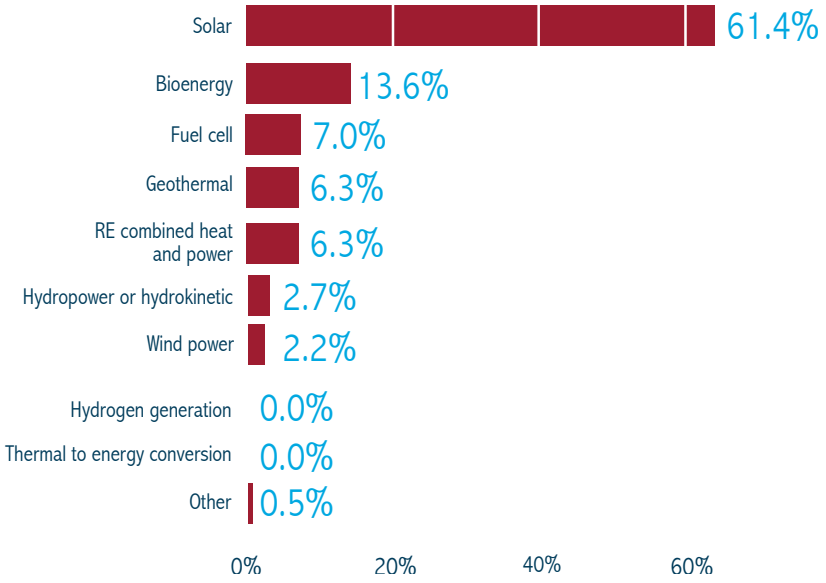


ENERGY EFFICIENCY AND SOLAR ENERGY SECTORS ARE BRIGHT SPOTS

The energy efficiency sector employs 32,576 clean energy workers, which is 83% of all clean energy jobs in Missouri.



6,050 Missourians work in renewable energy, with the majority working in solar (3,715). 2,829 of these workers spend at least 50% of their time supporting solar activities in Missouri. Another 822 work in bioenergy and 133 in Wind.

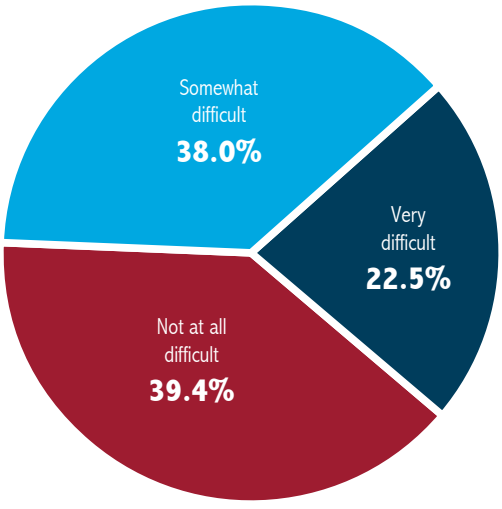


NEW JOB OPENINGS ON THE HORIZON

Retirements will also contribute to clean energy hires in Missouri, with 9.4% of the sector expected to retire over the next five years, representing approximately 3,700 positions.

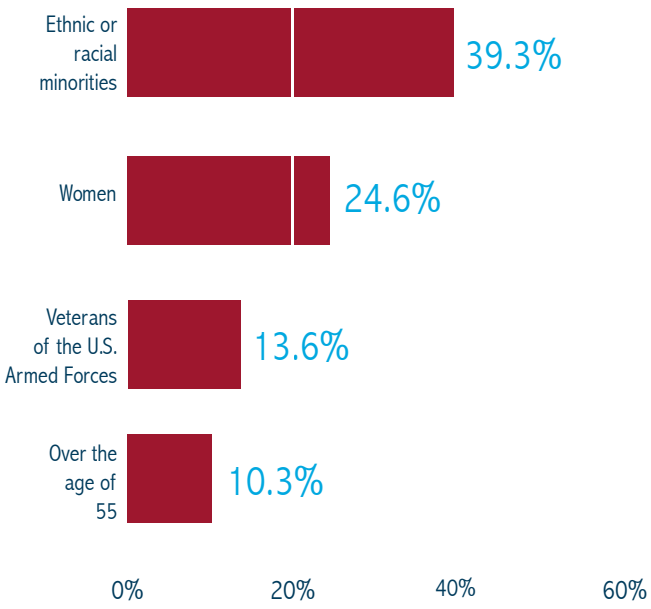
HIRING CHALLENGES

The clean energy job growth and replacement positions in Missouri are leading to employers reporting difficulty finding qualified workers, with 22.5% reporting that it is currently very difficult and another 38% reporting some difficulty.



A DIVERSE INDUSTRY

While clean energy is traditionally less diverse by gender, race, and ethnicity than the overall workforce, recent hires demonstrate more diversity. Nearly 25% of clean energy workers hired over the last 12 months are women, and 39.3% are ethnic or racial minorities. A sizeable 13.6% are veterans of the U.S. Armed Forces.



Labor Unions Leading the Way on Workforce Training

Missouri labor unions are playing a critical role in training the state's workforce to meet the growing demand for clean energy and transportation options across the state.

For example, in St. Louis, the International Brotherhood of Electrical Workers (IBEW) Local One and the St. Louis Chapter of the National Electrical Contractors Association (NECA) have teamed up to train and certify new hires and seasoned workers to take on clean energy and transportation installations at their state-of-the-art St. Louis Electrical Industry Training Center. The unions invest $2 million in training and retraining programs each year, self-funded by their members. Among its offerings, the Center runs over 70 training and certification classes in energy management systems, building retrofits, solar panel systems, electric vehicles infrastructure and other emerging clean energy and transportation technologies to their 5,500 members in the region.

As Dennis Gralike, Director of the St. Louis Electricians Joint Apprenticeship & Journeyman Committee which manages the Center, notes, "We are seeing more of our members participate in energy efficiency and renewable energy-related classes that we offer in recent years. It helps keep them employed for the work that has to be done and prepare them for the challenges they will face in the field."

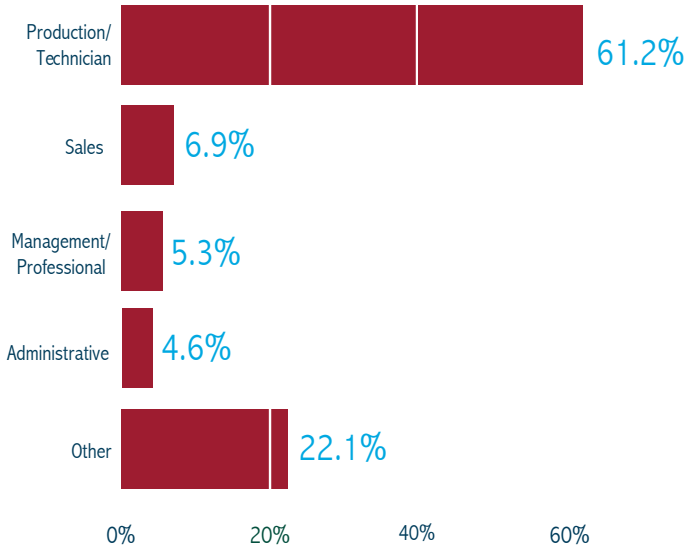
Evidence of the Center's programs and the qualified workforce it's providing is abound in the St. Louis region. In the past few years, IBEW's craftsman have helped to install solar arrays at sports facilities like the St. Louis Cardinals Stadium and the St. Louis Rams Training Facility, community landmarks like the St. Louis Zoo, major firms such as IKEA, and communities such as those near O'Fallon, where a new 5.7 MW solar project is providing clean, renewable energy. Local elementary and high schools are also benefitting from the IBEW's skilled workforce, which is improving the energy performance of those facilities, while cutting energy bills for taxpayers.

The unions are not only equipping more workers with appropriate skillsets to meet increased demand, but are ensuring their members' work meets high standards and ultimately delivers projected benefits. "Better skillsets, education, and communication can lead to projects that are under budget and on time," says Jim Curran, Executive Vice President of the Electrical Connection, a labor management partnership between the National Electrical Contractors Association (NECA) and IBEW Local 1, "That's what the unions are preparing their members to do."

--Environmental Entrepreneurs

TECHNICIANS AND PRODUCTION WORKERS IN HIGH DEMAND

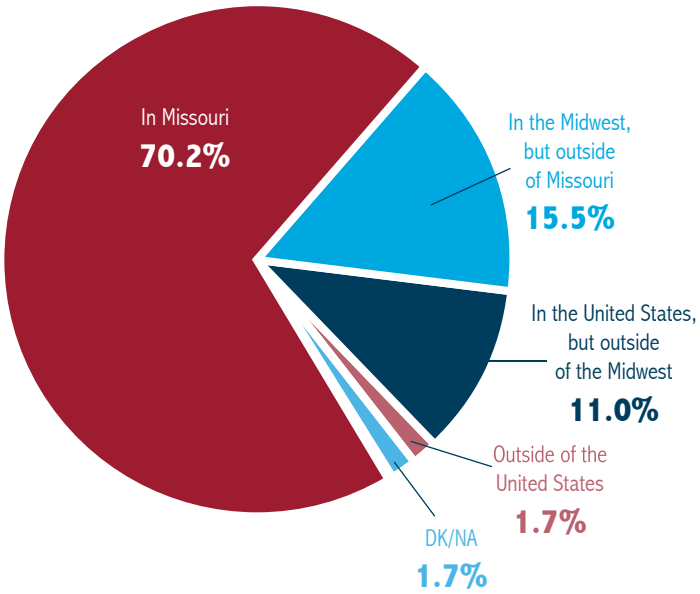
Most of the new positions hired over the last 12 months were either technician or production workers, largely in the installation and manufacturing sectors.



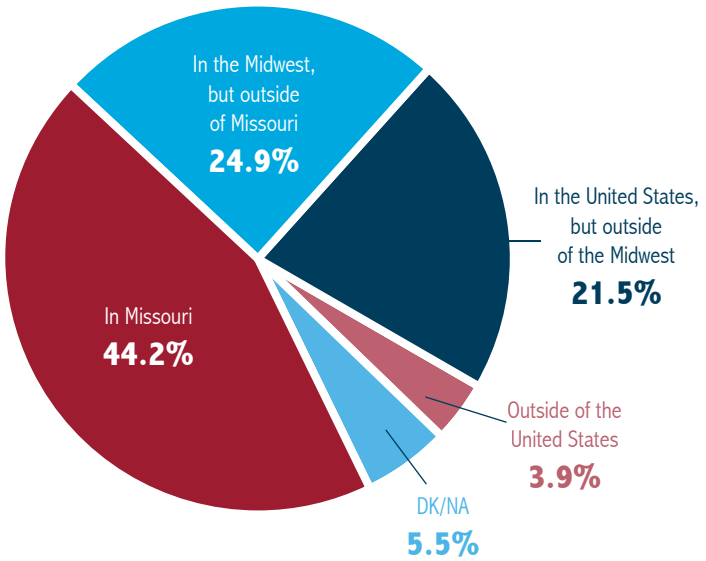
A LOCALLY FOCUSED INDUSTRY

Missouri's clean energy sector is very locally focused, with 70.2% reporting that their customers are primarily in-state (another 15.5% from elsewhere in the Midwest) and 44.2% of their vendors are in Missouri (another 24.9% from elsewhere in the Midwest).

Customer Location



Vendor Location



CASE STUDY: *Christian values guide One3 LED's growth*

In April 2011, three men from Chesterfield formed Ideal Energy Solutions, an energy consulting firm catering to utilities. As they gained experience with commercial energy efficiency incentives, they saw a big discrepancy between the energy efficiency incentives utilities were offering, and the number of consumers actually taking advantage of those incentives. "Plain and simple, we saw a big need in Missouri of people wanting to save energy, but not knowing how," said Wes Tucker, an Ideal Energy principal. Leveraging prior relationships in the consumer retail sector, Ideal Energy's founders began exploring other opportunities performing building retrofit projects featuring efficient lighting products. In June 2012, this morphed into a new business of its own: One3 LED.

One3 LED's unique name comes from the company founders' Christian faith – the title references Genesis 1:3: "And the Lord said, let there be light." "Christian principles purvey into everything we do," Tucker said. Tucker cites a Christian Land Ethic that motivates sustainable practices across the company. Not only does One3 LED market energy efficient products, the business also walks the walk by limiting plant energy consumption through the integration of automated controls for environmental systems, minimizing paper consumption by emphasizing digital text platforms, and practicing active recycling policies.

One3 LED partners with retail, commercial, transportation sector, and petroleum service clients. The company performs lighting audits and designs turnkey lighting solutions, partnering exclusively with U.S. manufacturers. "U.S.-made products, those are the best out there in our industry," Tucker said. One of One3's largest endeavors is staying out in front of industry technology trends. "LED product technology changes every single day," said project manager Michael Dorwart. Tucker added: "Most contractors, they don't want to have to figure this stuff out." At the same time, Tucker said growing customer awareness is a boon for the industry. "Over the last five years, we've seen energy efficiency become more and more socially acceptable," he said. "In the last year alone, we've seen a huge increase in people who say, 'Oh, why not LED?' " This growing consumer education has dramatically impacted sales: In the first two quarters of 2014, One3 LED has already done more businesses than it did all of last year.

--Environmental Entrepreneurs

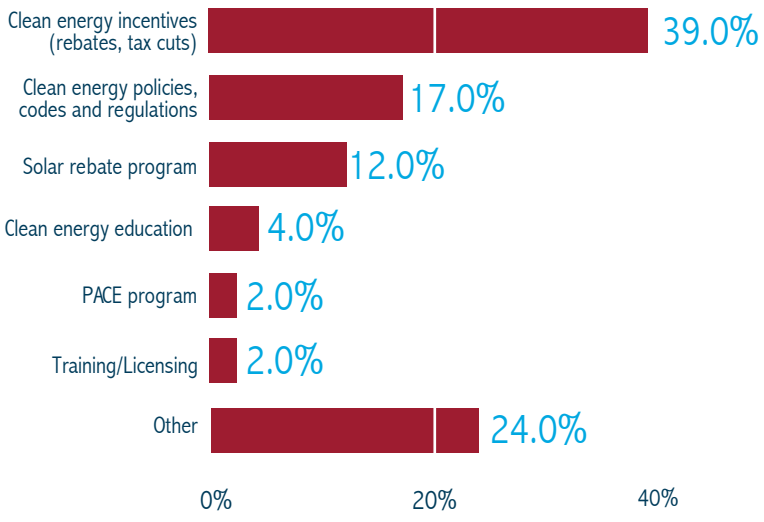
Photo: One of One3 LED's most recent projects is the Jewish Community Center in St. Louis. (Photo courtesy of One3 LED)

JOB OPPORTUNITIES IN EVERY PART OF THE STATE

More than one-third of Missouri's clean energy firms and workers are found in the St. Louis Metropolitan Statistical Area (MSA).[iv] The Kansas City MSA is home to 22% of Missouri's clean energy employment.

Region	Clean Energy Establishments	Clean Energy Employment	Percentage of State Clean Energy Employment
St. Louis	1,653	14,459	37%
Kansas City	936	8,507	22%
Rest of Missouri	1,820	16,450	42%
Total	4,409	39,416	100%*

* Percentages don't add up to 100 because of rounding.



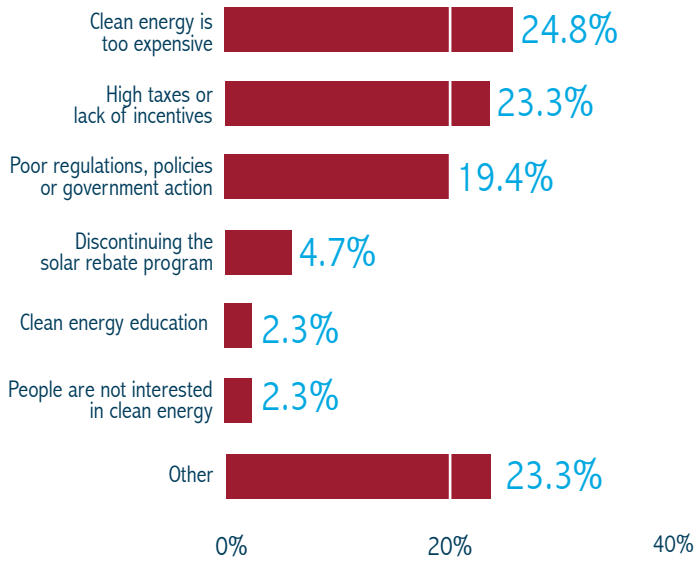
POLICY AND MARKET OUTLOOK

In addition to information on clean energy and transportation employment, the survey also asked firms which government or utility company policies or programs that have the greatest impact in fueling growth in sales and customers. Firms were given an open-ended, "unaided" response, meaning that no choices were offered as prompts, so answers were provided on recall without the benefit of examples. Furthermore, responses were not required, which suggests that these issues are top-of-mind issues for employers in Ohio.

Employers believe more clean energy incentives, such as rebates and tax breaks that help level the playing field for clean energy technologies, will be critical to future industry growth, with 39% mentioning clean energy incentives and another 12% specifically mentioning the state's successful solar rebate program that has been discontinued, due to meeting the 1% cost cap mandated by Missouri's renewable energy standard. Clean energy policies, codes, and regulations were also frequently mentioned, by 17% of employers.

[iv] Inclusive of Missouri only.

When asked to name a barrier to growth, about one quarter responded that clean energy is too expensive, 23.3% reported high taxes or lack of incentives, and 19.4% poor regulations, policies, or government action.



CONCLUSION

As this study finds, Missouri's clean energy and transportation businesses and workforce are driving economic growth and helping diversify the state's energy portfolio to include more clean energy options, like solar, wind and energy efficiency. The state has significant potential to further expand clean energy sources, creating additional jobs, helping homeowners and businesses use energy smarter, and protecting our health and environment.

Missouri's businesses have the ingenuity, manpower and commitment to make the state a leader in manufacturing and deploying these technologies. Policies and programs that help increase access to clean energy and transportation options and provide clear market signals for the private sector to invest and provide additional solutions will be critical to achieving a cleaner, more prosperous future for the state.

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DISCLAIMER

The inclusion of any company within this document is not a statement of support by those companies for any of the policy recommendations contained herein.

APPENDIX

Exhibit 1: NAICs Industry Codes Surveyed

NAICS	Description Code
111000	Crop Production
113110	Timber Tract Operations
113310	Logging
221111	Hydroelectric Power Generation
221113	Nuclear Electric Power Generation
221114	Solar Electric Power Generation
221115	Wind Electric Power Generation
221116	Geothermal Electric Power Generation
221117	Biomass Electric Power Generation
221118	Other Electric Power Generation
221122	Electric Power Distribution
221210	Natural Gas Distribution
221330	Steam and Air-Conditioning Supply
236115	New Single-Family Housing Construction (except For-Sale Builders)
236118	Residential Remodelers
237130	Power and Communication Line and Related Structures Construction
237990	Other Heavy and Civil Engineering Construction
238150	Glass and Glazing Contractors
238210	Electrical Contractors and Other Wiring Installation Contractors
238220	Plumbing, Heating, and Air-Conditioning Contractors
238310	Drywall and Insulation Contractors
238990	All Other Specialty Trade Contractors
325193	Ethyl Alcohol Manufacturing
332321	Metal Window and Door Manufacturing
333414	Heating Equipment (except Warm Air Furnaces) Manufacturing
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing
333611	Turbine and Turbine Generator Set Units Manufacturing
333613	Mechanical Power Transmission Equipment Manufacturing
334413	Semiconductor and Related Device Manufacturing
334512	Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use
335110	Electric Lamp Bulb and Part Manufacturing
335121	Residential Electric Lighting Fixture Manufacturing
335122	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing
335221	Household Cooking Appliance Manufacturing
335222	Household Refrigerator and Home Freezer Manufacturing
335224	Household Laundry Equipment Manufacturing
335228	Other Major Household Appliance Manufacturing
335311	Power, Distribution, and Specialty Transformer Manufacturing
335312	Motor and Generator Manufacturing
335911	Storage Battery Manufacturing
335999	All Other Miscellaneous Electrical Equipment and Component Manufacturing
336111	Automobile Manufacturing
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers
423730	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers
511210	Software Publishers
541310	Architectural Services
541330	Engineering Services
541350	Building Inspection Services
541370	Surveying and Mapping (except Geophysical) Services
541511	Custom Computer Programming Services
541512	Computer Systems Design Services
541614	Process, Physical Distribution, and Logistics Consulting Services
541620	Environmental Consulting Services
541690	Other Scientific and Technical Consulting Services
541711	Research and Development in Biotechnology
541712	Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)
811111	General Automotive Repair
811212	Computer and Office Machine Repair and Maintenance

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