



— Survey Results —

# CLEAN JOBS FLORIDA

*Sizing Up Florida's Clean Energy Jobs Base and its Potential*



Presented by



*Florida Chapter*



## 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).



*Florida Chapter*

The Energy Services Coalition is a national nonprofit organization composed of a network of experts from a wide range of organizations working together at the state and local levels to increase energy efficiency and building upgrades through energy savings performance contracting. The Florida Chapter of the Energy Services Coalition is dedicated to providing an outreach program that provides information and education on performance contracting to the target audience within our state.



The Florida Alliance for Renewable Energy (FARE) is an association of concerned individuals, businesses, manufacturers, communities, agricultural stakeholders, associations, policymakers, nonprofits, and renewable energy producers. FARE is dedicated to advancing a free market for renewable energy production and protecting fair access in Florida.

## 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.

## ACKNOWLEDGEMENTS

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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.

# INTRODUCTION

When it comes to clean energy, Florida is a state that's simply not living up to its potential.

To be sure, Florida's clean energy industry is big, it is growing, and it should be recognized as an important part of the state's economy.

In the first jobs census of its kind that focuses on Florida's clean economy, our research has found that more than 130,000 Floridians currently work at 14,000 clean energy and transportation businesses, which are spread almost equally across the state. Many of these are good-paying jobs that didn't exist a decade or so ago, at small businesses that are driving economic growth across Florida.

Those are big numbers. But they're only a fraction of the jobs and companies the state could create if it had policies to provide the certainty and longevity that Florida utilities and businesses need to invest in clean energy development.

The Sunshine State ranks No. 3 in the nation for solar energy potential. It could feasibly generate 25 times its current electricity needs with clean, renewable energy.<sup>1</sup> Homeowners and businesses could save billions of dollars by installing energy efficient systems and technologies.

Policies that drive investment in energy efficiency upgrades and renewable energy projects in Florida would not only keep energy dollars in-state to create and support local jobs and lower energy bills for

homeowners and businesses, but dramatically reduce carbon emissions and other forms of pollution that harm the state's health, environment and attractiveness to tourists and transplants alike.

For example, unlike the majority of states, Florida lacks a renewable portfolio standard that would drive growth in solar, wind and other clean energy sources. The state's energy efficiency resource standard, which sets energy savings goals for utilities, is only half as strong as the national average.<sup>2,3</sup> As a result, many efficiency opportunities remain untapped across the state.

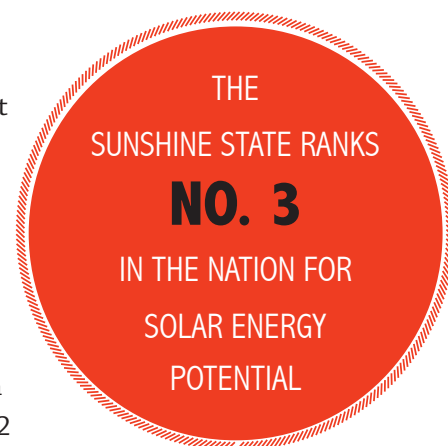
The lack of clean energy policy is creating significant opportunity costs that policymakers should consider.

Florida is the fifth-most coal dependent state in the nation. In 2012 alone, Floridians sent nearly \$1.3 billion of their hard-earned wages out of state to pay for coal energy.<sup>4</sup> In total, in 2012, Floridians spent more than \$50 billion on fossil fuel sources of energy.<sup>5</sup>

Florida households spend \$1,900 every year on electricity — 40 percent more than the national average — for cooling and heating that could be improved through energy efficiency programs.<sup>6</sup>

Meanwhile, solar costs have dropped 80 percent since 2009. Better energy efficiency technologies are helping customers save even more on their energy bills and pay for themselves over time.

Florida only has to look to neighboring states like North Carolina, South Carolina and Georgia for proof that smart policies can drive clean energy growth and the jobs that come with it. As a result of its renewable energy standard, North Carolina, for instance, attracted



nearly \$2.7 billion in clean energy investment and built an industry that supported more than 37,000 jobs in manufacturing, engineering, installation and other fields in the period from 2007 to 2013.

Other parts of the country are also proof that clean energy works. The sun doesn't shine any brighter in Illinois, Massachusetts, and Missouri than it does in Florida. But those much smaller states nonetheless have just as many or more clean energy jobs as a percentage of their overall workforce, and actually have larger percentages of renewable energy jobs than the Sunshine State.

What's the difference? Unlike Florida, those states have smart renewable energy and energy efficiency policies that are driving jobs and economic growth.

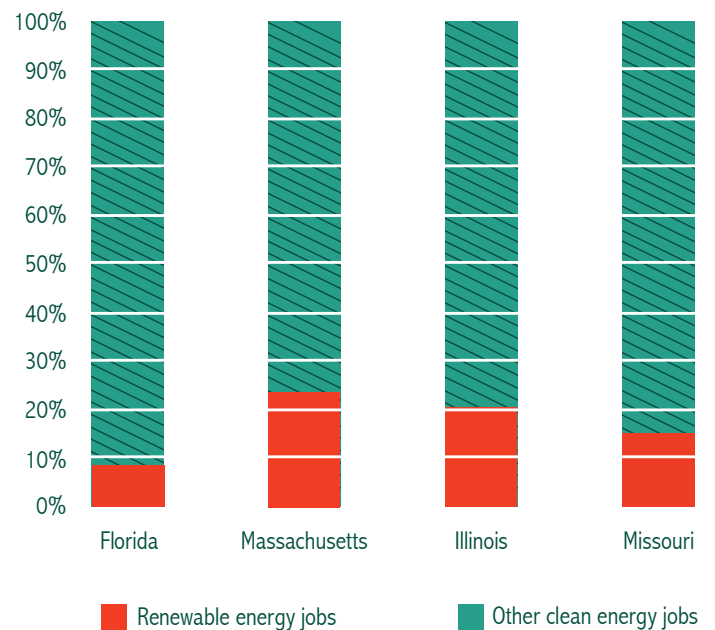
Florida's leaders could — and should — implement similar clean energy policies if they care about economic growth and job creation. And with the recent release of the federal Clean Power Plan, which will cut carbon pollution by 30 percent by 2030 in part by increasing renewable energy and energy efficiency, Florida has the perfect opportunity to enact policies to help the state live up to its clean energy potential.

A recent study by the Natural Resources Defense Council (NRDC) shows that ramping up utility energy efficiency programs alone could create 10,000 new jobs in Florida's energy efficiency sector, save Florida households and businesses nearly \$50 million per year on their electricity bills and reduce carbon pollution equal to the annual emissions of 2.4 million cars. A robust state plan that provides the private sector with clear market signals to invest in clean energy at the scale needed to meet the state's goals will reap even larger benefits across the state.

Clearly Florida's clean energy potential is huge. Fortunately, the state has a solid base of clean energy businesses and jobs on which to build. Relying on databases and survey data from Florida employers, the analysis to follow looks at the size and scope of the

state's clean energy economy in an effort to better understand the employment impacts of existing clean energy growth and what policies will be needed to support further growth. The companies and workers profiled in this report provide just a few examples of how the state's clean energy workforce is driving clean energy solutions, from energy efficiency building retrofits to solar power systems, all across the state. This growth is not only spurring more jobs and more investments in the state, but a healthier future for generations to come.

State Clean Energy Jobs



DESPITE ITS ABUNDANT RENEWABLE RESOURCES, FLORIDA'S RENEWABLE ENERGY JOBS MAKE UP A MUCH SMALLER PORTION OF ITS OVERALL CLEAN ENERGY ECONOMY THAN IN STATES WITH MORE FAVORABLE POLICIES LIKE ILLINOIS AND MASSACHUSETTS.

# EXECUTIVE SUMMARY

Clean energy — defined as renewable energy, energy efficiency, alternative transportation, and greenhouse gas management and accounting — is a significant and growing sector in Florida, yet the Sunshine State has only scratched the surface of its potential. With more than 130,000 clean energy workers at 14,000 businesses, about 1.5% of all jobs in Florida are in the clean energy industry. On a per-capita basis, this is much smaller than states such as Massachusetts and Vermont, despite Florida’s clearly greater natural resources.

Over the past year, Florida’s clean energy economy grew by 6% (7,500 jobs), double the overall job growth in the state. This growth is expected to continue, with companies expecting to add about 12,000 new jobs by 2015, growth rate of 9.2%.

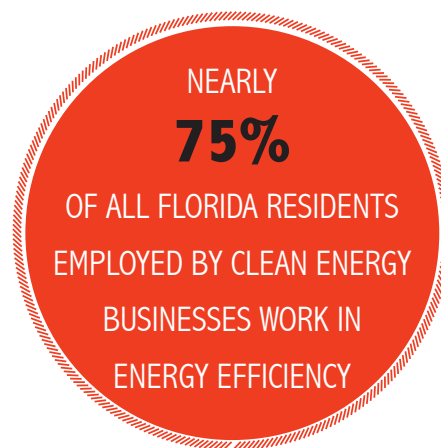
About 100,000 Floridians, or nearly 75% of all residents employed by clean energy businesses, work in energy efficiency. Only about 11,000 work in solar and other forms of renewable energy in the Sunshine State.

Florida’s clean energy industry is much more diverse than other states, with nearly half of all new hires reported to be ethnic or racial minorities and a quarter women. Nearly 70% of ethnic or racial minorities are Latino/Hispanic. Fifteen percent were reported to be veterans of the U.S. Armed Forces and 9% over the age of 55.

Technician-level workers are in high demand, likely the result of the oversized installation sector in Florida. At the same time, small businesses are clearly driving the cluster, with about 85% of companies having fewer than 25 employees.

Florida has a locally focused clean energy cluster, with solid majorities reporting that their vendors and customers are located within the state. While this suggests that the cluster is able to rely on a local supply chain, it also means that it has room to grow its export markets.

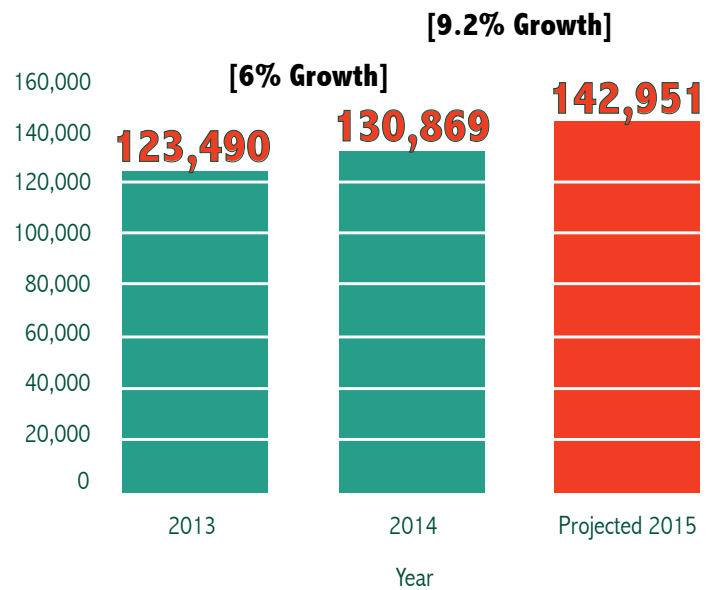
Incentives are clearly important to clean energy businesses, and employers were vocal about their frustrations with a lack of policies and engagement for driving adoption of clean energy goods and services. A more comprehensive and supportive policy environment, employers suggest, would allow for rapid expansion of payrolls.



# MAJOR FINDINGS

## A LARGE BASE AND OPTIMISM ON WHICH TO BUILD

Florida's clean energy job base is growing, adding nearly 7,500 jobs (6.0% growth) from 2013-2014. Employers expect hiring to pick up over the coming 12 months, with 34.5% of clean energy businesses projecting to add approximately 12,000 new clean energy workers (9.2% growth).

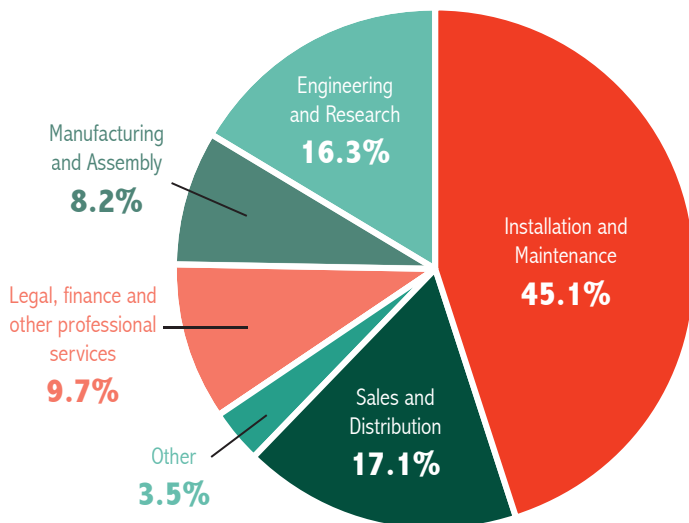
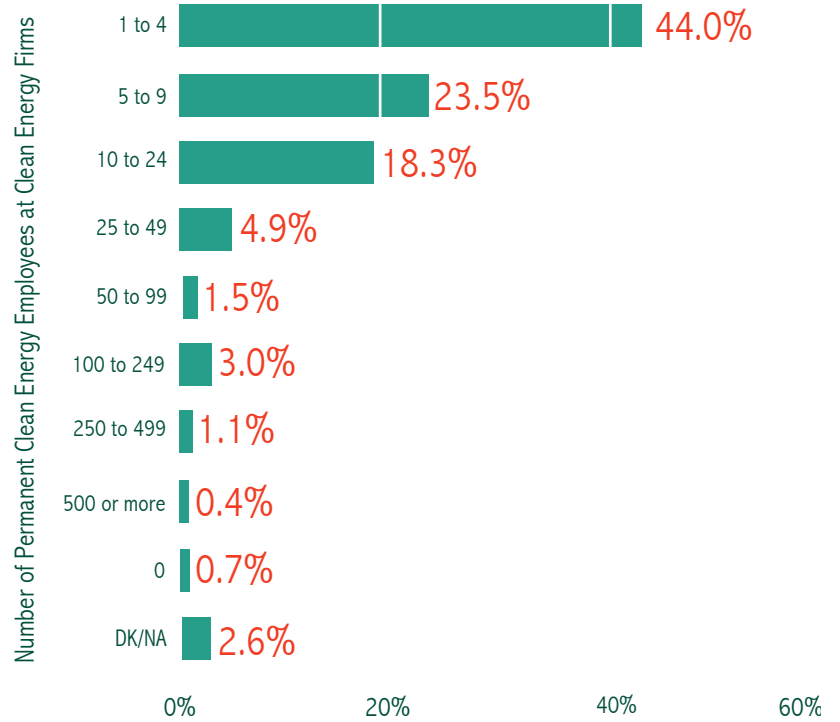


### A WORKFORCE FOCUSED ON CLEAN ENERGY SUCCESS

Nearly three in four (97,422) clean energy workers in Florida spend a majority of their time supporting clean energy activities in their day-to-day activities.

### SMALL BUSINESSES LEADING THE WAY

Clean energy firms are mostly small businesses, with 44% having fewer than five clean energy employees. More than two-thirds of clean energy businesses have fewer than 10 employees.



### WORK UP AND DOWN THE SUPPLY CHAIN

Nearly two in three Florida clean energy businesses work primarily in installation or sales.



**CASE STUDY: Market-leading Florida wind company says state has untapped potential**

Wind Turbine & Energy Cables Corporation, or WTEC, boasts its mission is to become the world’s largest and most innovative renewable energy operation. Since its inception in 2002, WTEC has grown to 200 experienced and dedicated employees working to bring low-cost and environmentally responsible power generation to communities throughout the United States.

WTEC’s position as a market leader in supplying renewable energy construction projects with quality materials and labor-saving equipment has allowed the company to vertically integrate other disciplines essential to building solar and wind farms, such as project design, engineering, and installation and construction services.

Christopher Delp, corporate counsel for WTEC, said that although WTEC’s construction headquarters is in Tampa, and one of its manufacturing facilities is in Pensacola, its solar and wind farm construction activities take place exclusively in states outside Florida.

While WTEC has been able to create a number of jobs in Florida, Delp expressed disappointment that the Sunshine State’s lack of clean energy policies has kept real economic development and widespread renewable energy job-creation from flourishing.

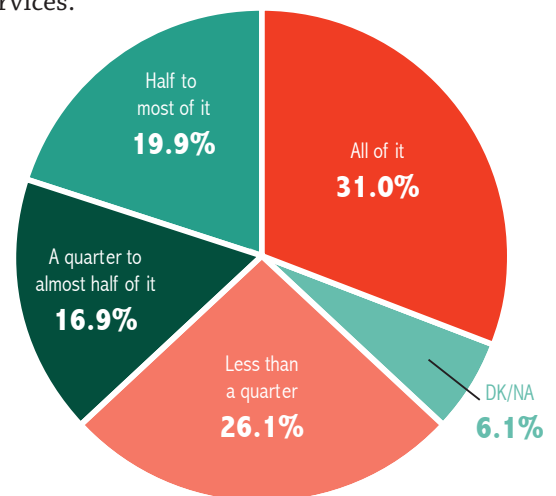
“At best, Floridians are getting merely a trickling byproduct of other state’s modern renewable energy practices, when instead the Sunshine State should be leading the country in renewable energy jobs,” Delp said. “The real kicker is that the same utilities who are heavily involved in advancing renewable energy in other states turn right around and tell Floridians that these same advancements would somehow be a bad idea for Florida.”

Whether or not Florida soon decides to reap the full economic and environmental benefits of clean energy, WTEC forecasts strong growth in solar and wind farm construction generally across the country over the next several years, but if the Sunshine State continues to lag on clean energy policies, then Florida will miss out on a sizeable portion of that growth.



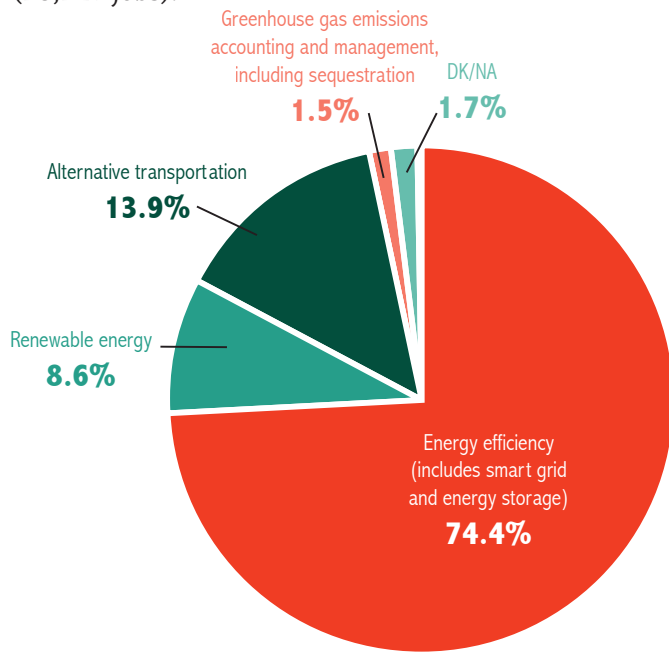
**CLEAN ENERGY ORDERS BRINGING REVENUES**

Half of all Florida clean energy businesses receive a majority of their revenue from clean energy goods and services.



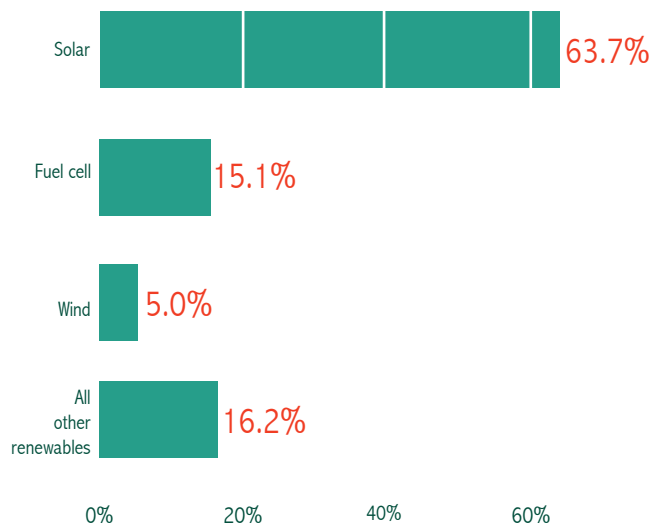
## ENERGY EFFICIENCY AND ALTERNATIVE TRANSPORTATION LEAD THE CLUSTER

The energy efficiency sector represents nearly 75% of Florida’s clean energy workforce (97,407 jobs), while alternative transportation adds another 14% (18,127 jobs).



## SOLAR SECTOR IS FLORIDA'S LEADING RENEWABLE JOB CREATOR

11,226 Floridians work in renewable energy, with the majority working in solar (7,149). 5,511 of these workers spend at least 50% of their time supporting solar activities in Florida. A notable 1,693 work with renewable fuels and fuel cells.



## CASE STUDY: TLC Engineering for Architecture

TLC Engineering for Architecture’s (TLC) origins are similar to those of other large companies today: it was founded in a garage. From its humble beginnings in 1955, to its status today as one of the largest MEP and structural engineering firms in the country, TLC has grown into a powerhouse in engineering. The company works in buildings as diverse as hospitals, commercial offices, schools, hotels, retail and entertainment, and among the many services TLC is equipped to provide to its clients efficient design and construction to minimize building energy costs. The firm’s 270-person team is based in 11 offices across the southeast, but their clients and work span the entire United States, as well as five continents.

TLC completed Florida’s first LEED-certified project in 2003, and has, in the past decade, worked closely on the certification of more than 260 LEED projects, which total more than 24 million square feet of sustainable space. Most recently, TLC’s Orlando-based completed projects include the now LEED Gold Darden Restaurants’ Headquarters, and the Dr. Phillips Center for the Performing Arts also in Orlando.

Beyond designing high-performance buildings, TLC’s team of LEED accredited professionals, certified commissioning authorities, energy management professionals, and building energy modeling professionals provides an array of energy services focused on the design and operation of sustainable, energy-efficient existing buildings. Services range from energy auditing, new and existing building commissioning, net operating income improvements, energy modeling, and sustainability consulting, all of which are crucial to meeting TLC’s aggressive sustainability goals.

Further, TLC was one of the first firms to commit to the American Institute of Architects (AIA) aggressive sustainability 2030 Challenge and continues to progress toward reducing their own environmental impact, as well as the impact of the buildings on which they work. USGBC just released their 2014 Best of Building Awards honoring TLC as the Best Large Engineering Firm and in 2013 TLC was recognized for the second year in a row as AIA’s Consultant of the Year.

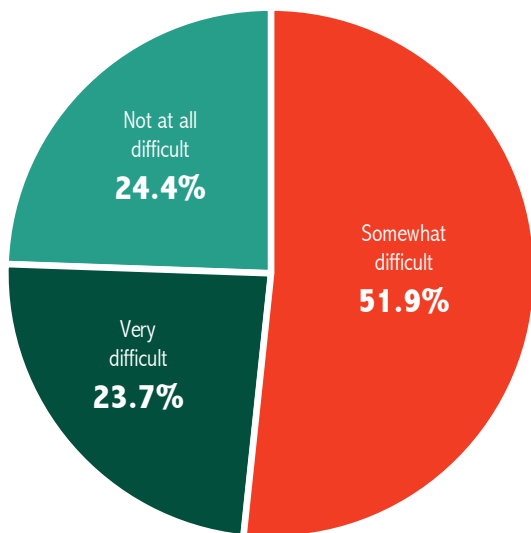


### NEW JOB OPENINGS ON THE HORIZON

Retirements will also contribute to clean energy hires in Florida, with 8.5% of the sector expected to retire over the next five years, representing approximately 11,150 positions.

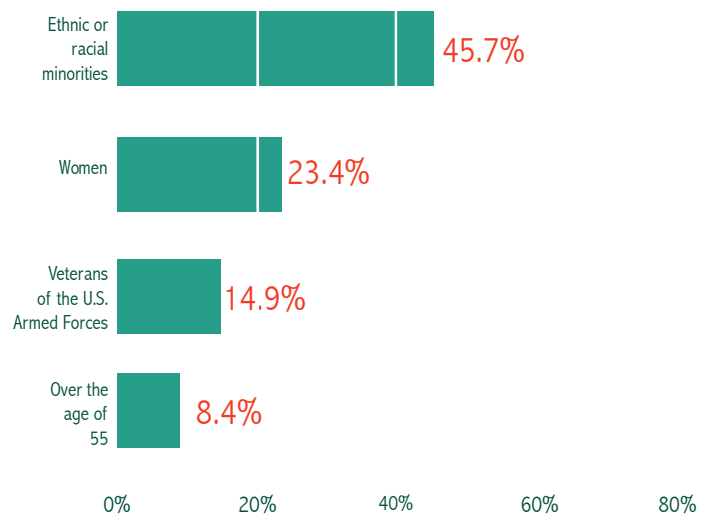
### HIRING CHALLENGES

The clean energy job growth and replacement positions in Florida are leading to employers reporting difficulty finding qualified workers, with 23.7% reporting that it is currently very difficult and another 52% reporting some difficulty. This means three in four employers have at least some difficulty finding the workers they need to fill open positions.



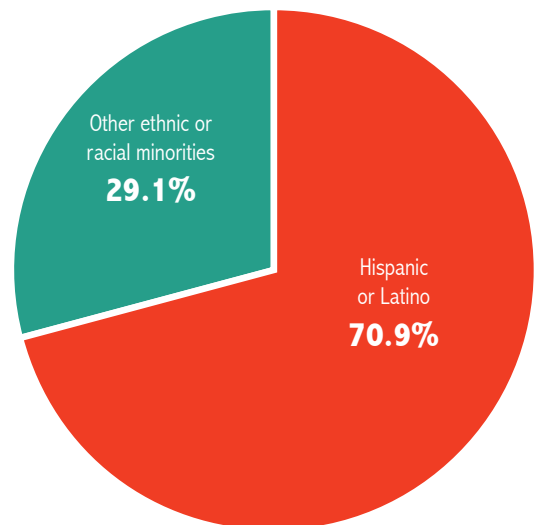
### A DIVERSE INDUSTRY

While clean energy is traditionally less diverse by gender, race, and ethnicity than the overall workforce, recent hires demonstrate more diversity in Florida. Similar to other states studied, nearly 25% of clean energy workers hired over the last 12 months are women. A much higher than average 45.7% of new hires are ethnic or racial minorities. A sizeable 14.9% are veterans of the U.S. Armed Forces.



### HIGH PERCENTAGE LATINO/HISPANIC

Of the ethnic and racial minorities hired, 70.9% are Latino/Hispanic.

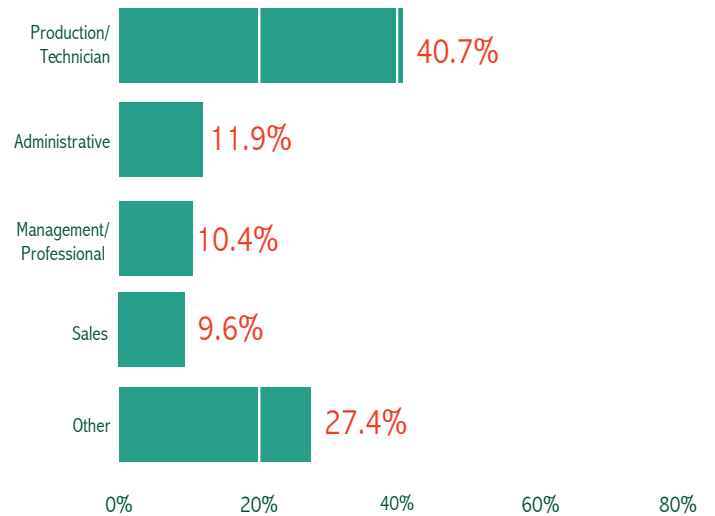


### TECHNICIANS AND PRODUCTION WORKERS IN HIGH DEMAND

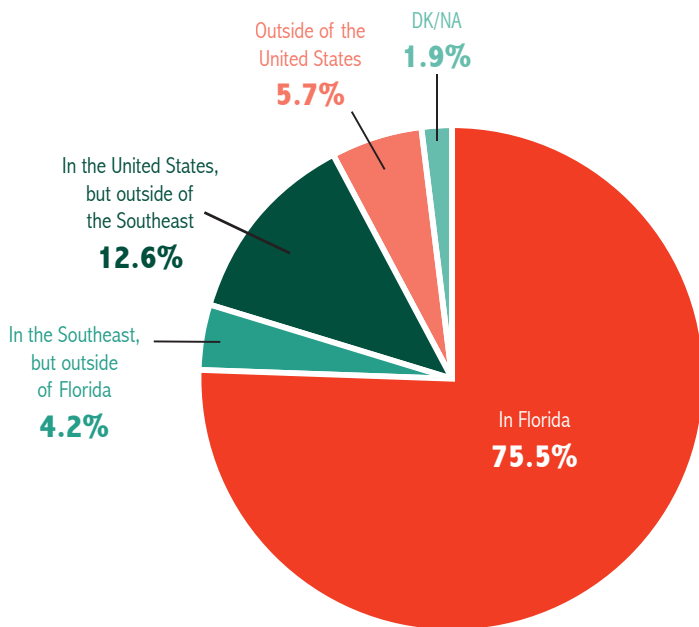
Most of the new positions hired over the last 12 months were either technician or production workers, largely in the installation and manufacturing sectors.

### A LOCALLY FOCUSED INDUSTRY

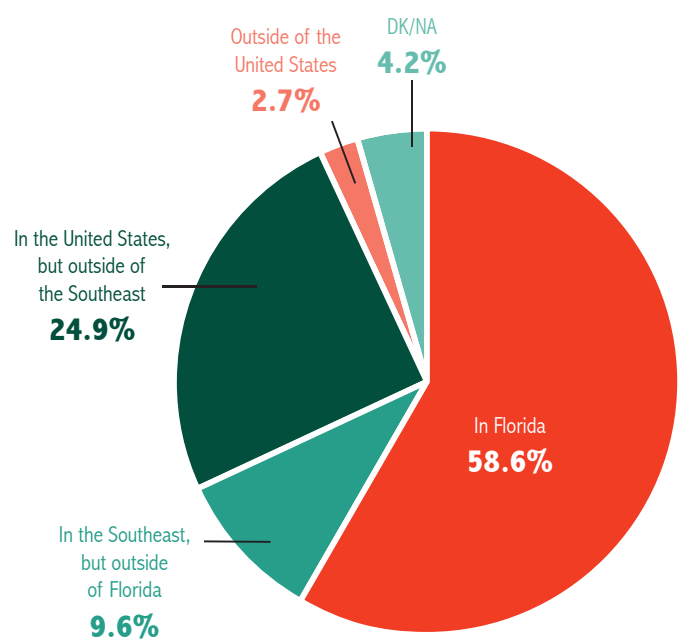
As with other states with a large energy efficiency installation presence, Florida's clean energy sector is very locally focused, with 75.5% reporting that their customers are primarily in-state (another 4.2% from elsewhere in the Southeast) and a significantly higher than typical 58.6% of their vendors are in Florida (another 9.6% from elsewhere in the Southeast).



#### Customer Location



#### Vendor Location



### JOB OPPORTUNITIES IN EVERY PART OF THE STATE

Employment is nearly evenly distributed across the state, with slightly more workers in the Southwest of the state.

Region	Clean Energy Establishments	Clean Energy Employment	Percentage of State Clean Energy Employment
North	3,504	32,505	24.8%
Central	3,044	30,812	23.5%
Southwest	4,021	36,377	27.8%
Southeast	4,423	31,175	23.8%
Total	14,992	130,869	100%

#### CASE STUDY: Growing renewable company has installed more than 20,000 solar systems

When asked about their 30 years of experience in the solar industry, Remo Eyal, CEO of TEVA Alternative Energy, LLC — Superior Solar Systems’ parent company — shared two things that have contributed to the firm’s long success rate: its focus on quality efficient solar systems and commitment to customer service. The Altamonte Springs-based company, which opened its doors in the 1980’s, has been growing steadily — adding 10 employees in the past year and a half alone — and has installed over 20,000 solar systems for residential, commercial, and industrial projects across the state. “More of our customers are realizing that solar makes financial sense. It provides security and stability. We receive very positive feedback on social media, something we are very proud of, because clients are elated with the end results,” says Eyal.

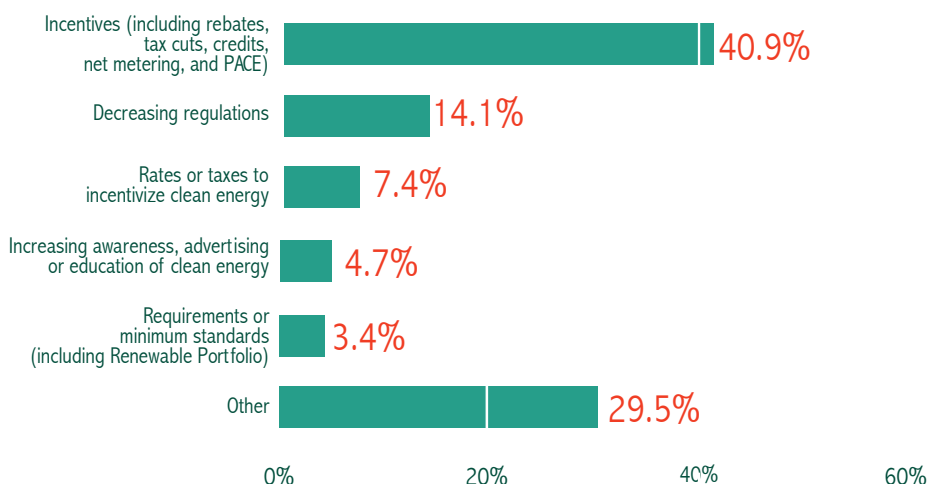
Despite their success in bringing solar electricity to Florida homeowners, businesses, and manufacturers, policy uncertainty at the state and federal levels has created a challenging market for solar companies like Superior Solar. Eyal says, “One of our biggest challenges is the inconsistency of solar incentives...Private utilities provide underfunded programs that get exhausted within minutes each year; this actually hinders our ability to build a stable PV market throughout the year.” The company cited both the lack of consistent incentives and policies in Florida as well as the sunset of the Federal Investment Tax Credit (ITC) for solar energy in 2016 as creating uncertainty for further investments in solar technologies.

Despite these challenges, Superior Solar has continued to grow by branching out beyond residential and commercial projects into larger industrial projects in states like California, Maryland and even a 30,000 sq. feet system in the Caribbean. Regarding growth prospects, Eyal says that they are selling more solar thermal in addition to the solar systems themselves, and that they are looking to expand into power purchase agreements with their thermal systems. “Only a few companies really do that.”

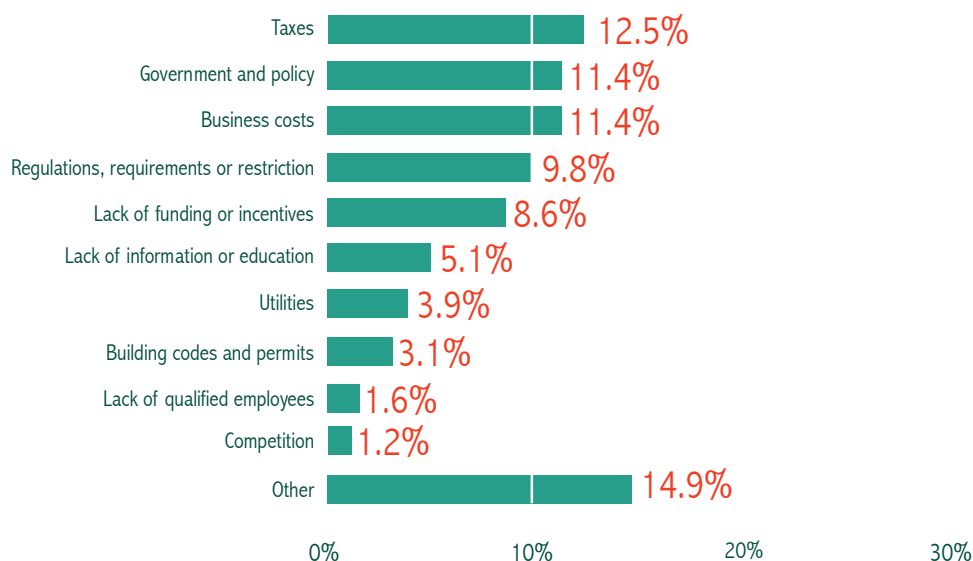


## POLICY AND MARKET OUTLOOK

Employers clearly seek more clean energy incentives, such as rebates and tax breaks, with 40.9% mentioning clean energy incentives (an additional 7.4% mentioned specific rate or tax incentives). Regulations were also frequently mentioned, by 14.1% of employers.



Taxes, government policy, and business costs were the three most frequently cited barriers to growth. While a notable number of firms held strong opinions about the state’s utilities (particularly renewable energy firms), a statistically small number of firms reported utilities as an obstacle.



## CONCLUSION

Florida’s clean energy businesses and workers are driving economic growth and providing cleaner, more sustainable energy options for communities across the state. However, as noted in this report, this 130,000-strong workforce represents only a fraction of the jobs that could be created if Florida had the right policies in place to support clean energy development.

The state’s utilities and businesses need clear market signals to invest in this growing industry and to provide access to the clean energy sources that homeowners and businesses want. Adopting a robust state implementation plan to meet standards set by the

federal Clean Power Plan and strengthening the state’s existing clean energy policies would be a big step in the right direction. By implementing smart clean energy policies like the renewable energy and energy efficiency standards that have helped drive job growth in North Carolina and in other states, Florida’s leaders can help spur economic growth and job creation.

Florida’s clean energy businesses understand the tremendous potential that the state is leaving on the table. They have the ingenuity, the manpower, and the commitment to make Florida a national leader in clean energy. They stand ready with the solutions to build a cleaner, more prosperous future for Florida.

**CASE STUDY: St. Petersburg lighting company employs 30 workers**

*In 2009, sculptor Eric Higgs designed a lighting installation that filled an entire block of downtown Tampa Bay with light. The abstract public art piece was intended to artistically enhance a parking structure, and was part of the city's beautification efforts. Higgs was an environmentalist in addition to being a sculptor, and recognized that the 20,000 watts required to power the sculpture was a waste of energy. He decided to search for a more energy-efficient lighting solution. Finding none, Higgs recognized the opportunity to create one himself, and partnered with leading lighting innovators to design LED fixtures that cut his sculpture's power consumption down to 890 watts. Higgs found the quality and efficiency of the lighting to be greater than any market alternative, and LumaStream was born.*

*LumaStream began with residential customers and the outdoor lighting for the Museum of Fine Arts in St. Petersburg. As the company grew, it focused on a unique, all-digital approach to LED lighting. While this innovative approach brought its share of challenges, it also brought opportunities, and today LumaStream provides one of the most energy efficient, controllable, safe, and reliable LED solutions on the market.*

*Jennifer Andrews, LumaStream's marketing manager, notes that the patented power distribution technology improves "the performance, reliability, energy efficiency, and controllability of LED lighting," in addition to reducing maintenance requirements. But viewers are most impressed by the "virtually unlimited number of displays of colors and programmable lighting scenes."*

*As more customers became aware of the quality and efficiency of LumaStream's products, the company began designing lighting for restaurant chains and hotels. Today, it has completed hundreds of projects, has offices in Washington and Virginia, and employs more than 30 engineers, lighting specialists, sales representatives, and other staff. When asked about the company's expansion goals, Andrews laughed and said, "It seems like we are hiring someone new every week."*



## METHODOLOGY

### Industry Survey Methodology

The data in the report was derived from a comprehensive survey of business establishments in Florida conducted between August 21 and September 21, 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 Massachusetts, Illinois, Vermont, Missouri, Iowa, and other states, as well as several national analyses.

For this study, the research team placed 11,667 telephone calls and sent 2,611 emails to employers. The combined margin of error for the survey effort was approximately +/- 3.36% at a 95% confidence interval. The survey yielded 832 responses from employers in Florida and averaged 12 minutes in length.

### “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 973 businesses.

### “Unknown Universe”

The “unknown universe” included firms not previously identified by researchers as clean energy companies. This database was drawn from BLS NAICS industries and InfoUSA businesses. 767 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 +/- 3.3% at a confidence level of 95%. Of the firms that provided information, 204 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.



## Clean Energy Bright Spots in Florida

*In 2012, Florida's investor-owned utilities performed more than 200,000 residential energy audits and invested more than \$387 million in energy efficiency programs to date. These existing programs saved state residents more than \$62 million on their energy bills — enough power to meet the needs of more than 42,000 Florida households in 2011.<sup>7</sup>*

*Cities like Orlando are also stepping up to the plate to improve their energy performance as well. Mayor Buddy Dyer's Green Works program has saved the city more than \$1 million in annual energy bill savings; expanded downtown bus and rail service; and resulted in the completion of eight LEED-certified buildings. In January 2014, Orlando joined with nine other cities across the nation to participate in a new 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 harmful pollution.*

## ENDNOTES

- <sup>1</sup> Works Cited: National Renewable Energy Laboratory, "U.S. Renewable Energy Technical Potentials: A GIS-Based Analysis" July 2012. Online. Accessible: <http://www.nrel.gov/docs/fy12osti/51946.pdf>
- <sup>2</sup> [http://www.dsireusa.org/incentives/incentive.cfm?Incentive\\_Code=FL25R&re=0&ee=0](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=FL25R&re=0&ee=0)
- <sup>3</sup> Florida Public Service Commission. "Evaluation of Florida's Energy Efficiency and Conservation Act." December 2012. Online. Accessible: [http://war-rington.ufl.edu/centers/purc/docs/FEECA\\_FinalReport2012.pdf](http://war-rington.ufl.edu/centers/purc/docs/FEECA_FinalReport2012.pdf)
- <sup>4</sup> Union of Concerned Scientists, Burning Coal, Burning Cash: Ranking the States that Import the Most Coal: 2014 Update, January 2014, available at [http://www.ucsusa.org/sites/default/files/legacy/assets/documents/clean\\_energy/Burning-Coal-Burning-Cash-2014-Update-National-Findings.pdf](http://www.ucsusa.org/sites/default/files/legacy/assets/documents/clean_energy/Burning-Coal-Burning-Cash-2014-Update-National-Findings.pdf), accessed on September 25, 2014.
- <sup>5</sup> U.S. Energy Information Administration (EIA), "Florida State Energy Profile," <http://www.eia.gov/state/print.cfm?sid=FL>
- <sup>6</sup> U.S. Energy Information Administration (EIA), "Florida State Energy Profile," March 27, 2014, <http://www.eia.gov/state/print.cfm?sid=FL> [www.eia.gov/state/print.cfm?sid=FL](http://www.eia.gov/state/print.cfm?sid=FL).
- <sup>7</sup> American Council for an Energy-Efficiency Economy "The 2013 State Energy Efficiency Scorecard" November 2013. Online. Accessible: <http://aceee.org/research-report/e13k> and Energy Information Administration "How Much Electricity Does an American Home Use?" March 2013. Online. Accessible: <http://www.eia.gov/tools/faqs/faq.cfm?id=97&t=3>

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