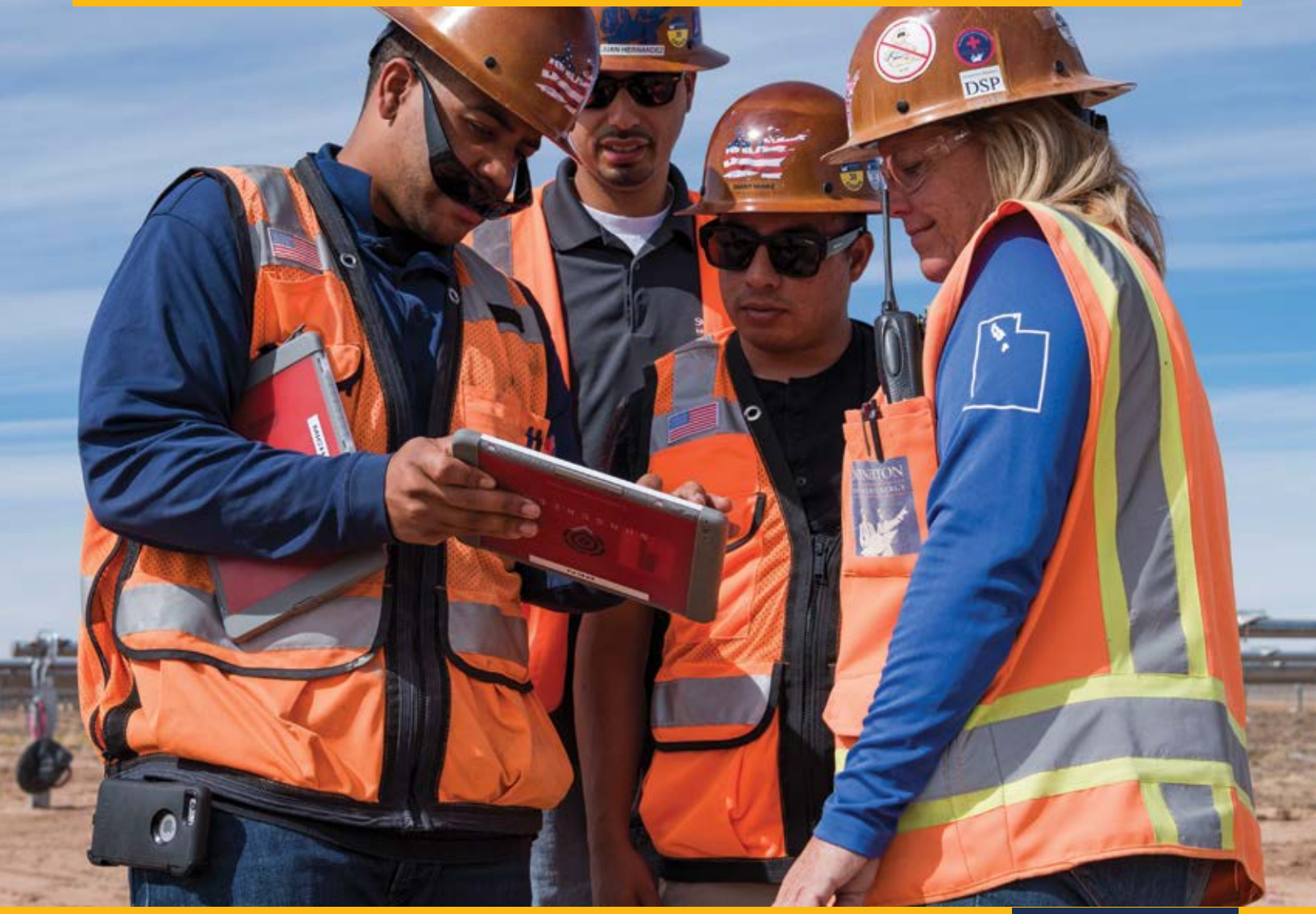
2017

U.S. SOLAR INDUSTRY DIVERSITY STUDY:

Current Trends, Best Practices, and Recommendations



SEPTEMBER 2017

The SOLAR FOUNDATION™
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WE Women's Empowerment at SEIA

ABOUT THE SOLAR FOUNDATION®

The Solar Foundation® is an independent 501(c)(3) nonprofit organization whose mission is to accelerate adoption of the world's most abundant energy source. Through its leadership, research, and capacity building, the Foundation creates transformative solutions to achieve a prosperous future in which solar technology is integrated into all aspects of our lives. The Solar Foundation is considered the premier research organization on the solar labor workforce, employer trends, and the economic impacts of solar. It has provided expert advice to leading organizations such as the National Academies, the Inter-American Development Bank, the U.S. Department of Energy, and others during a time of dynamic industry growth and policy and economic uncertainty. While The Solar Foundation recognizes that solar energy is a key part of our energy future, it is committed to excellence in its aim to help people fairly and objectively gauge the value and importance of solar and solar-compatible technologies. Learn more at **TheSolarFoundation.org**.

ABOUT SOLAR ENERGY INDUSTRIES ASSOCIATION'S (SEIA'S) WOMEN'S EMPOWERMENT COMMITTEE

SEIA's Women's Empowerment Committee (WEC) is made up of 60+ industry leaders, both men and women. WEC is committed to education, to the advancement of careers for women in the solar industry, to mentoring future solar leaders, and to establishing opportunities for women.

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The 2017 U.S. Solar Industry Diversity Study is the first of its kind and seeks to establish the first comprehensive baseline on diversity and inclusion in the solar industry. In the future, The Solar Foundation intends to annually track changes and progress made.

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STUDY SPONSORSHIP LEVELS:

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DEFINITIONS

ANALYSIS

- **Baseline analysis:** This refers to the fact that this is the first-ever study of diversity in the solar sector. It is our hope that future efforts will use this as a comparison point.

DEMOGRAPHICS

- **Demographics:** Refers to statistical data related to the population. For this study, demographics refer to age, gender, sexual orientation, ethnicity, veteran status, and education.
- **Diversity (workplace):** Workplace diversity refers to the variety of differences among people in an organization. For this study, it encompasses race, gender, ethnic group, age, sexual orientation, and military background.
- **Gender Non-Binary:** This refers to a type of gender identity where individuals identify themselves as neither male nor female.
- **Hispanic or Latino:** This demographic category refers to respondents that identify themselves as being ethnically Hispanic or Latino in the survey. This question was based on ethnic identification and was asked separately of the race categories to be consistent with the Bureau of Labor Statistics (BLS) methodology. Latino, for the purposes of this report, refers to all genders.
- **LGBTQ:** This refers to individuals who identify themselves as lesbian, gay, bisexual, transgender, and questioning. Individuals who identified themselves as such are referenced as the members of the LGBTQ community in this report.
- **People of color:** For this study, this includes respondents that identify their race as American Indian or Alaskan Native, Asian, Black or African American, or more than one of the above. When referencing men, men of color is used. When referencing women, women of color is used.

FIRM TYPE

- **Business Owners/Entrepreneurs:** These are defined as individuals who have started their own company and generally have fewer than five employees.

- **Downstream Solar Firms:** For this study, this refers to solar firms that engage in installation and project development activities.
- **Large Business:** For this study, a large business is defined as a firm employing 50 or more permanent employees.
- **Medium Business:** For this study, a medium business is defined as a firm employing between 11 and 49 permanent employees.
- **Small Business:** For this study, a small business is defined as a firm employing between 1 and 10 employees.
- **"Other" Solar Firms:** For this study, this refers to solar firms that do not fit into the above categories. This includes companies that engage in finance, legal services, research, advocacy, not for profit activities, etc.
- **Third-party Recruiters:** These are defined as independent recruiters or talent hunters that are contracted by solar and/or energy companies to uncover, vet, and hire individuals.
- **Upstream Solar Firms:** For this study, this refers to solar firms that engage in manufacturing, sales & distribution activities.

ROLES AND RESPONSIBILITIES

- **Mentorship:** An arrangement in which an individual serves as a mentor and advises the mentee on various aspects of his or her job and career.
- **Sponsorship:** An arrangement in which an individual serves as a sponsor and plays an active role in an employee's career promotion and growth, and ensures that the employee grows in their career.
- **Manager, Director, President (MDP) Level Positions:** For this study, this category includes employees in leadership positions at higher levels, including managers, directors, vice-presidents, executives, etc.
- **Mid-level Positions:** For this study, this category includes employees in positions such as analysts, assistant managers, coordinators, designers, engineers, etc.

Executive Summary

The Solar Foundation's *2017 U.S. Solar Industry Diversity Study* is the first comprehensive research and baseline analysis of diversity in the solar industry. The data and analysis included in this report are the result of surveys and interviews conducted with both solar employers and employees.

The Solar Foundation's *National National Solar Jobs Census 2016* shows that there are more than 260,000 solar workers nationwide, and in 2016, one in out of every 50 new U.S. jobs were in solar. Although the industry has seen growth over the years, women make up only 28% of the solar workforce. This represents a four-percentage point increase from 2015, the largest annual jump to date. People of color still comprise relatively small percentages of the domestic solar workforce which has remained relatively stagnant over recent years. Today, 17% of U.S. solar workers are Hispanic or Latino, 7% are African American, 9% are Asian, and American Indian or Alaskan Native and Native Hawaiian each account for less than 1%. Veterans of the U.S. Armed Forces make up 9% of the industry's workforce.

In this first quantitative and qualitative *Solar Industry Diversity Study*, which synthesizes data from both employers and employees, The Solar Foundationn sought to go beyond these high-level numbers and develop more granular insights that ensure a greater understanding of diversity in the industry so that change may occur over time.

Key Findings from the Employee Survey:

POSITIONS BY RACE

- People of color are more likely to be represented at mid-level positions than at the Manager, Director, and President (MDP) level. This difference is particularly notable for African American respondents hold mid-level positions, while only 18% hold MDP level positions.
- Women of color face the greatest discrepancy in promotion from mid-level positions to MDP level positions and the lowest likelihood of earning top-tier wages.

WAGES BY GENDER AND RACE

- Men are significantly more likely to earn wages that fall in the highest wage bracket of $75 or more per hour. Thirty-six percent of white male respondents earn salaries in this wage bracket, compared to 28% of men of color and 21% of white women. Women of color are grossly excluded from the highest wage category, with only 4% of women of color earning wages above $75 per hour.
- Only 8% of African Americans indicated that they are "very satisfied" with their wage and position, and 42% indicated that they are "not at all satisfied." For comparison, 52% of white respondents said that they are "very satisfied" with their wage and position, and only 6% of white respondents indicated that they are "not at all satisfied".[1]
- Women of color are least likely to be "very satisfied" with their current wage and position, with only 19% of women of color choosing this response (compared to 47% of men of color respondents, 60% of white male respondents, and 45% of white female respondents).
- All women and people of color are less likely to earn executive level wages compared to white men.

[1] The response on this question for Hispanic or Latinos is not included because it did not pass the statistical significance test. However, just looking at raw data, the responses were almost split equally between "very satisfied" and "somewhat satisfied."

CAREER GROWTH

- In terms of career growth, 50% of all respondents indicated that they have successfully moved up the career ladder and continue to do so. However, women are significantly more likely to respond that they have not been successful in moving up the career ladder (12% of women vs 4% of men).
- Only 8% of African American respondents feel that they have successfully moved up the career ladder, and 50% think they have not been successful in moving up in their careers and feel stuck in their current positions. This differs greatly from 52% of white respondents and 58% of Asian respondents that feel they have successfully moved up the career ladder.

MENTORSHIP/SPONSORSHIP

- Overall, women are less likely than men to serve as mentors or sponsors. 62% of men responded that they have served as mentors or sponsors versus 38% of women. The gaps in mentorships between men and women reduce after reaching MDP level positions. Sixty-four percent of female respondents at MDP level serve as mentors or sponsors, five percent more than 59% of men serving as mentors in MDP positions.

Key Findings from the Employer Survey:

TRACKING AND PROMOTING DIVERSITY

- Just a little over a quarter of solar employers formally track employee demographics and diversity. 47% of employer respondents do not formally track employee diversity and 25% do not know the answer and/or refused to answer.
- In terms of specific programs to promote advancement and diversity, 41% of solar employer respondents have mentorship/sponsorship programs. Only 14% have a strategy in place to increase female representation, and 7% have a strategy in place to increase the representation of people of color.
- Although the Solar Energy Industry Association (SEIA) has made a commitment to hire 50,000 veterans by 2020, veteran hiring strategies have not spread across the wider industry. Just over 1 in 10 companies have a strategy to increase the representation of veterans at their firms.

HIRING PREFERENCES

- Solar companies most commonly prefer to post jobs on sites like Indeed, Monster, and CareerBuilder. Following this, word of mouth and online media are noted as the next preferred methods for recruiting. While these methods are often the most popular and have a wide reach, they may miss the opportunity in attracting candidates who may not be in the network.

In addition to an in-depth dive into the above findings, this report underscores the importance of diversity for employee well-being, the strength of the workforce, and a company's bottom line. The study concludes with key recommendations and five action items that solar companies can implement over the next year. These action items include: creating a company-wide diversity pledge, establishing a formal diversity tracking and measurement tool, broadening recruitment efforts, implementing a less biased job application process, and establishing diversity training programs.

The full report can be found at: www.TheSolarFoundation.org/diversity.


Sarah

Introduction

The 2017 *U.S. Solar Industry Diversity Study* is the first of its kind, comprehensive baseline analysis of diversity in the solar industry. The study is based on statistically significant data gathered from surveys and interviews with both solar employers and employees, and provides a close examination of the representation and experiences of women, people of color, and to the extent possible, Hispanics or Latinos, veterans, and members of the LGBTQ community in the solar industry.

The Solar Foundation's *National Solar Jobs Census 2016* shows that there are more than 260,000 solar workers nationwide, and in 2016, one in out of every 50 new U.S. jobs were in solar. Although the industry has seen growth over the years, women make up only 28% of the solar workforce. This represents a four-percentage point increase from 2015, the largest annual jump to date. People of color still comprise relatively small percentages of the domestic solar workforce which has remained relatively stagnant over recent years. Today, 17% of U.S. solar workers are Hispanic or Latino, 7% are African American, 9% are Asian, and American Indian or Alaskan Native and Native Hawaiian each account for less than 1%. Veterans of the U.S. Armed Forces make up 9% of the industry's workforce.

The Solar Foundation has long believed what renowned management consultant and educator Peter Drucker once wrote: "If you can't measure it, you can't improve it." Thus, in addition to the annual National Solar Jobs Census, in 2015 The Solar Foundation issued a report on diversity and career pathways for disadvantaged populations in the state of Maryland. Long interested in going beyond anecdotes, myths, and assumptions, this first Solar Industry Diversity Study establishes a clear baseline for the U.S. and answers the following questions:

- What is the current landscape of diversity in the solar industry? How does it compare to other industries?
- What roles and responsibilities do individuals from diverse backgrounds hold in the solar industry?
- What are the examples of current policies, programs, and activities firms are employing to increase hiring of women, people of color, veterans, and members of the LGBTQ community?
- What are the best practices? How can the solar industry work toward increasing diversity in its workforce?

This report aims to go beyond the numbers and display a comprehensive understanding of diversity practices in the industry, as well as the experiences of men, women, people of color, veterans, and members of the LGBTQ community.

The following sections detail the findings from our surveys and lay out a set of best practices, recommendations, and action items companies might undertake to strengthen their diversity efforts. This report also includes five case studies of solar companies and organizations that are working toward making their workforce more inclusive. While the findings from our survey may not come as a surprise to some people, based on national trends on the topic of diversity and general observations of the solar industry workforce, it is our intent that the ideas presented here lead to meaningful actions, resulting in an increasingly diverse solar workforce. As substantial evidence suggests, diversity is positive for employee well-being, strength of the workforce, and a company's bottom line.

The Case for Diversity

From information technology to utilities to academia, there is an ongoing push to increase workplace diversity of women, people of color, veterans, and members of the LGBTQ community to more accurately reflect the composition of the U.S. population.

Diversity in the American workplace has been steadily increasing over the years. Currently, women and people of color make up 47% and 34% of the American labor force, respectively.[2] This is a dramatic increase over previous years. In the 1950s, for example, women accounted for only 29.6% of the labor force.[3] Despite this increase in female representation, it is not yet seen across managerial and executive levels. Women still account for only 4.2% of CEO positions. In fact, at the large firms listed in the S&P 1500, female CEOs are outnumbered by CEOs named John alone.[4] This discrepancy exists for people of color as well. Within the history of Fortune 500 companies, there have only been 15 African American CEOs; four of which hold CEO positions today.[5] Of these, Ursula Burns of Xerox, who stepped down in 2016, is the only African American woman to have ever served as a CEO of a Fortune 500 company.

This lack of diversity has proven counter-productive as studies show companies with more diverse employees often fare better in both employee satisfaction and profitability. One study shows that companies with more diverse executive boards see 53% higher returns on equity compared to companies that score in the bottom quartile for diversity.[6] Other studies show that having women in the senior management ranks of a company increases profitability.[7] In 2016, research by the Peterson Institute for International Economics of 22,000 publicly-traded companies in 91 countries showed that companies with at least a third of their executive positions filled by women enjoyed, on average, an extra 6% in profits. Improvements in profits could be attributed to the inclusion of a range of skill sets and perspectives, resulting in better decision-making. Moreover, increased diversity allows companies to recruit, promote, and retain top talent resulting in a positive bottom line.[8]

Similarly, other studies show that companies that rank at the top for racial and ethnic diversity overall are 35% more likely to have higher financial returns compared to their counterparts.[9] A 2015 study found that organizations in the top quartile for gender diversity were 15% more likely to have above-average financial returns, while organizations with significant racial and ethnic diversity were 35% more likely to have above-average financial returns.[10]

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2 Labor Force Statistics from the Current Population Survey, Bureau of Labor Statistics (BLS), February 8, 2017 https://www.bls.gov/cps/cpsaat18.htm (Last accessed: August 22, 2017)

3 Burns, Crosby, Barton Kimberly et al. "The State of Diversity in Today's Workforce", Center for American Progress, July 12, 2012 https://www.americanprogress.org/issues/economy/reports/2012/07/12/11938/the-state-of-diversity-in-todays-workforce/. (Last accessed: August 22, 2017)

4 "Fewer Women Run Big Companies Than Men Named John", *The New York Times*, March 2, 2015 https://www.nytimes.com/2015/03/03/upshot/fewer-women-run-big-companies-than-men-named-john.html?_r=0&abt=0002&abg=0. (Last accessed: August 22, 2017)

5 "Why There Are No Black Women Running Fortune 500 Companies" *Fortune*, January 16, 2017 http://fortune.com/2017/01/16/black-women-fortune-500/ (Last accessed: August 22, 2017)

6 Barta, Thomas, Kleiner, Markus et al., "Is there a payoff from top-team diversity?, McKinsey and Company, April 2012 http://www.mckinsey.com/business-functions/organization/our-insights/is-there-a-payoff-from-top-team-diversity (Last accessed: August 22, 2017)

7 Worstall, Tim, "Business Gender Diversity Solved: More Women Means More Profits", *Forbes*, February 10, 2016 https://www.forbes.com/sites/timworstall/2016/02/10/business-gender-diversity-solved-more-women-means-more-profits/#7e186667170f (Last accessed: August 22, 2017)

8 Noland, Marcus, Moran, Tyler et al., "Is Gender Diversity Profitable? Evidence from a Global Survey", Peterson Institute for International Economics, February 2016 (https://piie.com/publications/wp/wp16-3.pdf) (Last accessed: August 22, 2017)

9 Hunt, Vivian, Layton Dennis et al., "Why Diversity Matters", McKinsey and Company, January 2015 http://www.mckinsey.com/business-functions/organization/our-insights/why-diversity-matters (Last accessed: August 22, 2017)

10 Ibid

Diversity in the workplace also fosters innovation and creativity, and consequently increases a company's market share.[11] Having a diverse workforce can introduce a company to new markets. According to HIP Investor Inc., companies that have a diverse workforce understand the unique characteristics of their customers and build products and services around those customers, leading to a greater diversification of revenues.[12] In addition, employees from varied backgrounds can provide unique insights into the customer base with authentic reflections on cultural nuances, thereby giving companies a competitive edge.

The evidence for diversity and inclusion resulting in emotional well-being is significant as well. Based on the *Do Something Different* program, an employee at a highly inclusive firm is four times more likely to report a healthy sense of well-being compared to one working at a firm with low levels of inclusiveness.[13] A more diverse staff also helps a company attract and retain employees. A survey completed by the job site Glassdoor shows that 67% of respondents rated a diverse workforce as an important factor when evaluating companies and job offers.[14]

Solar and other clean energy industries play an important role in the promotion of inclusiveness across the U.S. economy. The Solar Energy Industries Association (SEIA), along with groups such as the National Association for the Advancement of Colored People (NAACP), GRID Alternatives, and Vote Solar, to name a few, recognize the value of solar and clean energy in achieving environmental and economic justice for people of color and disadvantaged communities, not just on the consumer side, but also as a provider. According to the NAACP, African Americans, Native Americans, and low-income Americans are more likely to face health threats caused by power plant facilities and spend a larger share of their income on energy. At the same time, they are underrepresented in the energy industry workforce, severely limiting their ability to influence decisions ultimately impacting their communities. To address this inequality, institutions at all levels of governance are called to enact policy changes that work to reduce energy costs while expanding employment and business opportunities for people of color and low-income individuals.[15]

Similar efforts by the Greenlining Institute work toward providing communities of color a voice on energy issues by ensuring that employment policies are fair and non-discriminatory and increase access to contracting opportunities for people of color, women, and veteran-owned businesses.[16]

Methodology

The 2017 *U.S. Solar Industry Diversity Study* includes primary data from two separate national surveys of solar employers and employees. In addition to this primary data source, the report also cites secondary data sources, including;

- U.S. Census Quarterly Workforce Indicators (QWI)[17]
- U.S. Bureau of Labor Statistics[18]

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11 Abreu, Kim, "The Myriad Benefits of Diversity in the Workplace", Entreprenuer.com, December 9, 2014 https://www.entrepreneur.com/article/240550 (last accessed: August 22, 2017)

12 "Does Your Company's Diversity Match Your Customers?", Reuters, March 11, 2011 http://hipinvestor.com/how-clients-use-hip/ (Last accessed: August 24, 2017)

13 Fletcher, Ben, "Diversity and Inclusiveness Is Good For Your Well-being", Psychology Today, September 18, 2016 https://www.psychologytoday.com/blog/do-something-different/201609/diversity-and-inclusiveness-is-good-your-well-being (Last accessed: August 22, 2017)

14 "What Job Seekers Really Think of Your Diversity Stats", Glassdoor, November 17, 2014, https://www.glassdoor.com/employers/blog/diversity/ (Last accessed: August 24, 2017)

15 "Just Energy Policies: Reducing Pollution and Creating Jobs", National Association for the Advancement of Colored People (NAACP), January 2014 https://www.naacp.org/wp-content/uploads/2016/04/JustEnergyPolicies%20Compendium%20FINAL%20DECEMBER%202013%20UPDATED%20%28Corrected%20ToC%29.pdf (Last accessed: August 22, 2017)

16 "Clean Power," The Greenlining Institute, http://greenlining.org/issues-impact/energy/clean-power/ (Last accessed: August 28, 2017)

17 QWI Explorer, U.S. Census Bureau Center for Economic Studies, https://qwiexplorer.ces.census.gov/static/explore.html#x=0&g=0 (Last Accessed September 25, 2017)

18 "Employed persons 18 years and over by industry, class of worker, sex, veteran status, and period of service, 2016 annual averages," Bureau of Labor Statistics, March 22, 2017 https://www.bls.gov/cps/cpsaat18.htm (Last accessed: August 23, 2017)

The online survey efforts for both solar employers and employees resulted in 375 and 279 responses, respectively. The employer survey was administered on behalf of The Solar Foundation by BW Research Partnership to a known universe of energy employers, derived from SEIA's National Solar Database (NSD). A total of 34,600 emails were sent to potential survey respondents. The employee survey was administered via email and newsletters (using anonymous survey links) and in-person intercept surveys. Only the responses that passed a 90% statistical significance test are presented in this report.

The Solar Foundation aligned its methodology on race and ethnicity with the Bureau of Labor Statistics (BLS).[19] The research team asked two separate ethnicity and race-related questions. In the ethnicity question, respondents were asked whether they identified themselves as Hispanic or Latino, and in the race-related question, whether they identified as American Indian, Asian, Black or African American, white, or more than one of the options. Thus, to avoid double counting, the results of these two questions are presented separately.

Following the surveys, the research team administered detailed ethnography surveys to self-selected human resource representatives of solar companies, and solar employees. The team collected 29 online and 10 ethnographic responses over the phone from solar company employees as well as 19 follow-up ethnographic responses from solar company human resource representatives.

This report also contains five case studies of solar companies and organizations. They are intended to serve as models for companies that are exploring ways to improve their workforce diversity.

It is important to note that as with any survey, there is an inherent risk of respondent bias in self-reported views and opinions. Respondents tend to under-report or over-report their thoughts, opinions, and information on some topics.

Only statistically significant results are provided here. Several questions pertaining to Hispanic or Latino and LGBTQ demographic groups did not pass the statistical significance test, and therefore, are not included in this report.

The report refers to employment totals from the *National National Solar Jobs Census 2016*. The methodology for the Census can be found here: www.thesolarfoundation.org/national/

19 "Labor Force Characteristics by Race and Ethnicity, 2015" Bureau of Labor Statistics, 2015 https://www.bls.gov/opub/reports/race-and-ethnicity/2015/home.htm (Last Accessed: August 25, 2017)

Employee Survey

RESPONDENT PROFILE

Of the 279 individuals that completed the employee survey, 49.5% are men, 48.4% are women, and 1.4% identified as gender non-binary. Of all respondents, 7.5% identified as Hispanic or Latino. 76.3% identified as white, 8.6% as Asian, 4.3% as Black or African American, 0.4% as American Indian or Alaskan Native, and 6.8% as more than one of the above. 3.9% of respondents identified themselves as veterans of the U.S. Armed Forces. 10.4% of respondents identified themselves as members of the LGBTQ community.[20]

POSITION BREAKDOWN BY GENDER AND RACE

There is an equal split among survey respondents who consider themselves mid-level and those who consider themselves in "Manager, Director, President" (MDP) level positions. People of color are more likely to be represented in higher numbers in mid-level positions compared to MDP level positions. Conversely, white respondents are slightly more likely to hold MDP level positions compared to mid-level positions. This difference is particularly notable for African American respondents; 82% of them hold mid-level positions, while only 18% hold MDP level positions, as depicted in Figure 1.

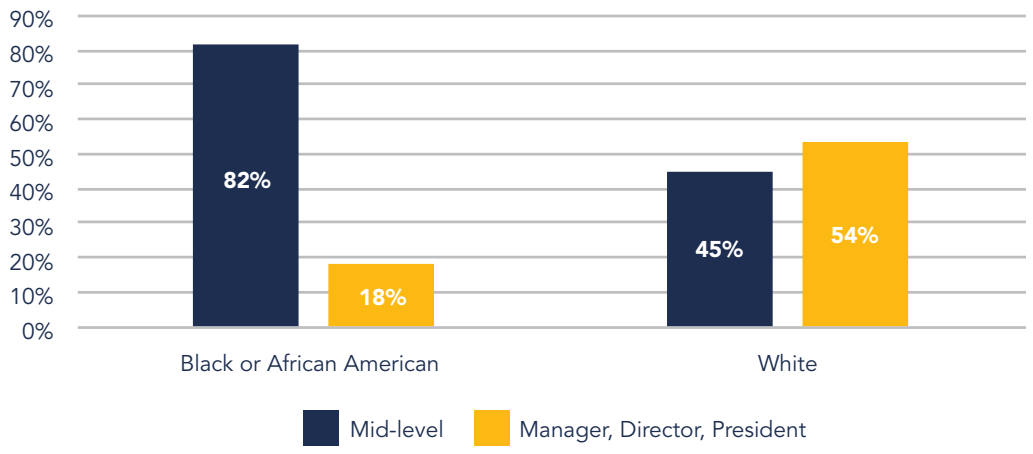


Figure 1: Job Title Comparison: African American vs. White Respondents

Figure 2 provides granular and intersectional data broken out by women and men of color in comparison to white women and men. This highlights an extremely grim reality. Women of color are significantly less likely than all other groups to be promoted to MDP level positions. Women of color respondents are roughly seven times more likely to hold mid-level positions (88%) than MDP level positions (12%). Meanwhile, 44% of white female respondents hold mid-level positions, and 55% hold MDP level positions. Comparing white men with men of color, 50% of men of color respondents hold mid-level positions, and 47% hold MDP level positions. 45% of white male respondents hold mid-level positions and 52% hold MDP positions.

20 While our survey shows members of the LGBTQ community make up over 10% of the solar industry workforce, the sample size was not large enough to allow data analysis that passed the statistical significance test.

SunLink: DNA-Ingrained Diversity

MILL VALLEY, CALIFORNIA

When SunLink employees talk about the company's commitment to diversity, they can't pinpoint the exact day when the organization's leadership decided to take up the issue. That's because the company's commitment to inclusivity is rooted in the company's very own DNA. CEO Michael Maulick knows that having a diverse team offers vital benefits to his business, including creative problem-solving, product innovation, and improved communication and recruitment. The company's workforce reflects these corporate values: 50% of the company's workforce is comprised of African-American, Hispanic, and Asian-American professionals, and 30% of the workforce is comprised of women. Impressively, 50% of the company's executive team is female, and more than 70% of the company's departments have at least one female manager.

SunLink's commitment to diversity has become a core tenet of the company's brand, and the company makes a point of mentioning its commitment to diversity in its job postings. Being based in a culturally rich region like the San Francisco Bay Area, SunLink has the benefit of access to a diverse talent base, and top talent considers strong workplace diversity among their selection criteria when considering employers. SunLink employees have experienced this during the interview process, as job candidates regularly cite this value as a reason why they are interested in joining the company. Candidates appreciate the fact that SunLink has a number of women not only in middle management, but also at the executive level, which reflects a well-balanced company. After employees join the team, SunLink makes a concerted effort to promote from within, support informal mentoring, and elevate diverse voices for speaking engagements and other professional development opportunities.

SunLink's focus on equality and its efforts to elevate diverse voices both internally and externally have had a compounding impact, becoming central to the company's brand, aiding with recruitment efforts and allowing their employees to see pathways to executive leadership positions. The company's story is a testament to how strong executive leadership and an inclusive company culture contribute to building a diverse, supportive workplace. Learn more at www.sunlink.com.

CASE STUDY

The percentage of women to reach MDP level is nearly equal to the percentage of men at MDP level. It is important to note that this does not necessarily translate to women holding executive level jobs. Universally, men are still more likely to serve in the executive roles compared to women, and consequently are much more likely to earn wages over $75 per hour, as shown in the next section.

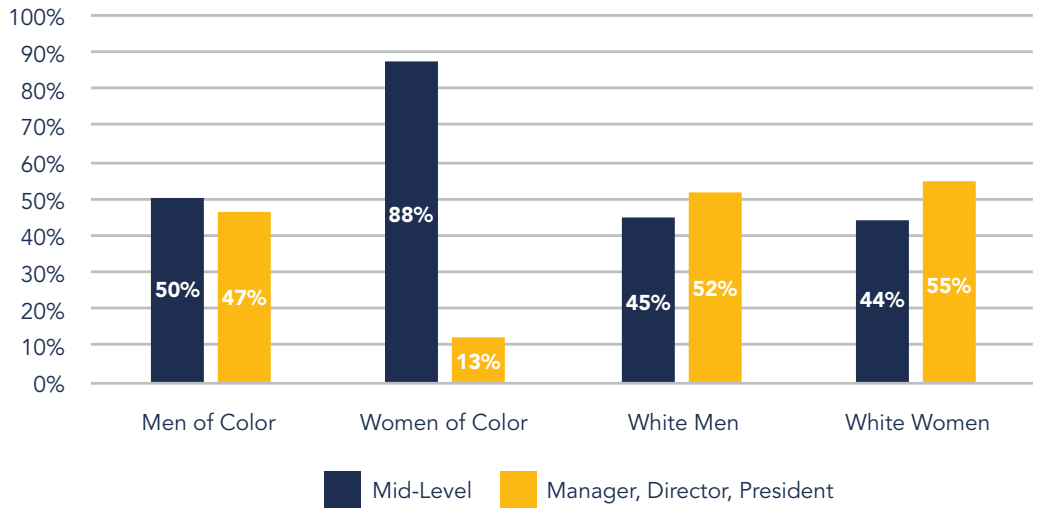
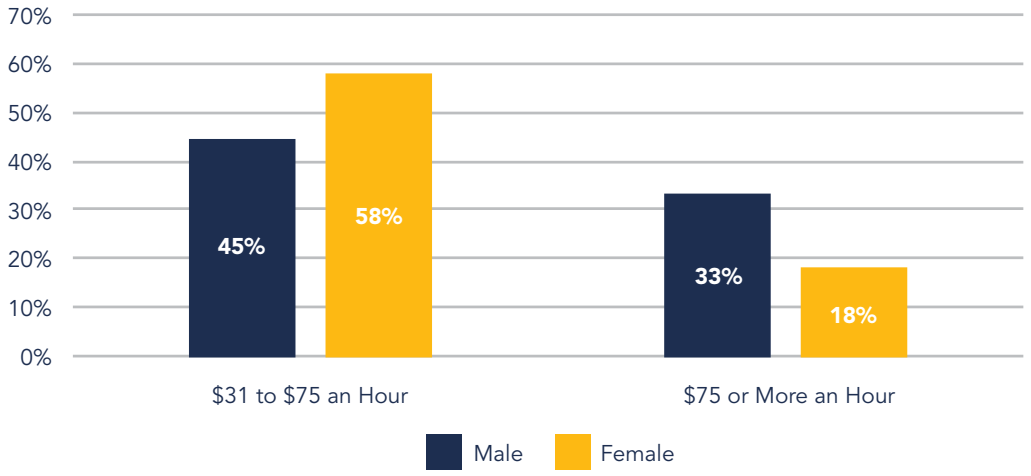


Figure 2: Breakdown of Job Titles by Gender and Race

WAGE BREAKDOWN BY GENDER AND RACE

In terms of wages, men are more likely than women to earn wages that fall in the highest wage bracket of $75 or more per hour, shown in Figure 3.



Note: Respondents also had the option to choose a $1-$30 an hour wage category. This category did not produce statistically significant results when split by gender, and is therefore not displayed here. The data displayed in this chart is 95% statistically significant.

Figure 3: Hourly Wages by Gender

When dissecting wages by race and gender, Figure 4 shows that white men are most likely to earn wages of $75 or more an hour. According to the findings, 36% of white male respondents earned wages at or above this threshold, compared to 28% of men of color and 20% of white women. Women of color are grossly excluded from the highest wage category, with only 4% of women of color respondents earning above $75 per hour.

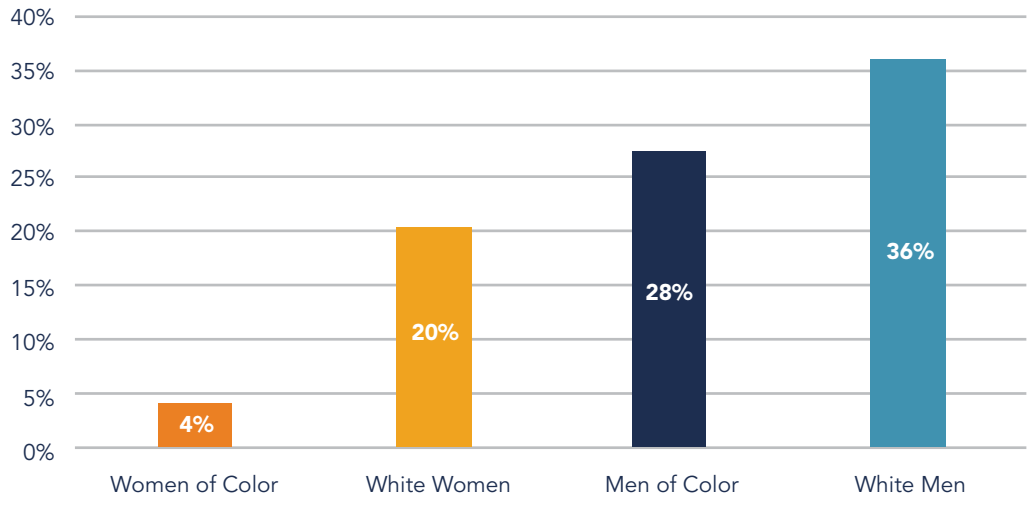


Figure 4: $75 an Hour and Above Wage by Gender and Race

Women of color saw both the greatest discrepancy in promotion from mid-level positions to MDP level positions and the lowest likelihood of earning top-tier salaries. Similarly, all women and people of color are less likely to earn executive level wages compared to white men.

SATISFACTION WITH WAGE AND POSITION

In response to the question, "How satisfied are you with your current pay and responsibility at your firm?" Forty-eight percent of all respondents indicated that they are "very satisfied," 45% responded that they are "somewhat satisfied", and 7.2% responded "not at all satisfied." There is a stark difference between African American respondents in comparison to other respondents. As shown in Figure 5, only 8% of African Americans indicated that they are "very satisfied" with their wage and position, and 42% indicated that they are "not at all satisfied." Comparably, 38% of Asian respondents and 52% of white respondents indicated that they are "very satisfied" with their wage and position. Only 8% of Asian respondents and 6% of white respondents indicated that they are "not at all satisfied" with their wage and position.

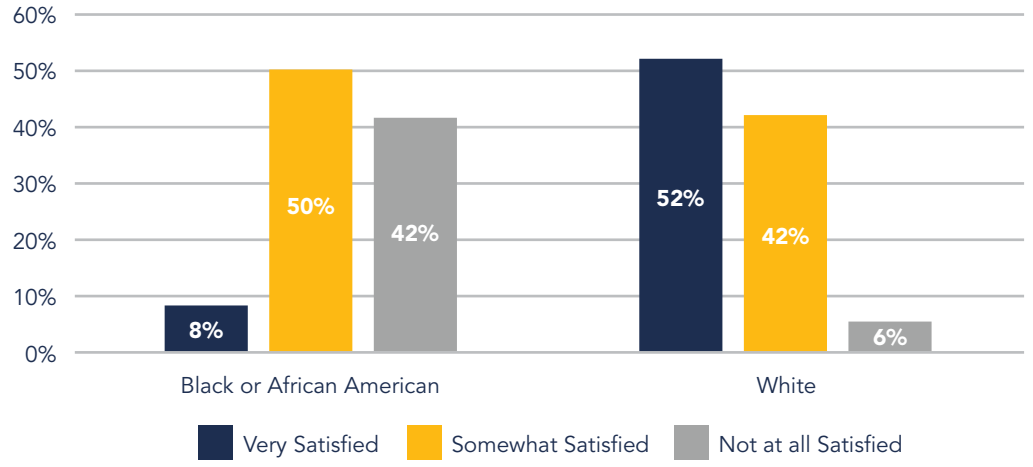


Figure 5: Satisfaction with Wage and Position by Race

Not surprisingly, given our previous findings on wage and position, women of color are least likely to be "very satisfied" with their current wage and position, with only 19% of them choosing this response (compared to 47% of male respondents of color, 60% of white male respondents, and 45% of white female respondents).

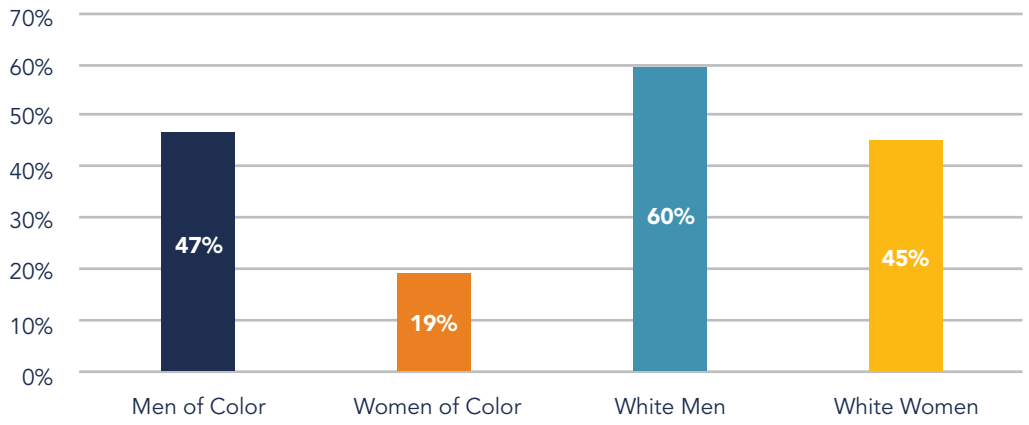


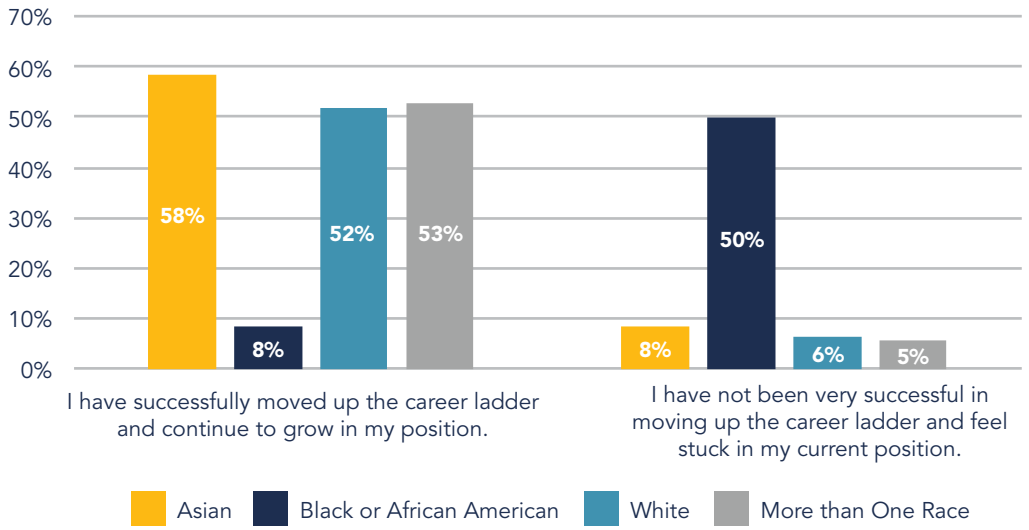
Figure 6: "Very Satisfied" with Wage and Position by Gender and Race

One possible explanation for the differences in the level of dissatisfaction is the widening wage discrepancies between people of color and white men and women. Research conducted by the Economic Policy Institute shows that the wage gap has widened drastically between black and white men as well as between black and white women. The wage gap between black and white men increased by almost 9% from 1979 to 2015 and 13% between black women and white women for the same period.[21]

CAREER GROWTH BY GENDER AND RACE

In terms of career growth, 50% of respondents indicated they have successfully moved up the career ladder and continue to do so. Men are more likely to rate themselves as having successfully moved up the career ladder compared to women, though not by much, with only a 5% difference. However, women are significantly more likely to respond that they have not been successful in moving up the career ladder (12% of women vs 4% of men).

Of the Hispanic or Latino respondents, 33% feel they have successfully moved up the career ladder compared to 51% of non-Hispanic respondents. Views on moving up the career ladder for African Americans respondents are notably different from other respondents. As shown in Figure 7, only 8% of



Note: The two responses in this chart represent two out of four response options listed in the survey. These two responses are displayed because they are the only responses that passed a 95% statistical significance test.

Figure 7: Career Ladder by Race

21 "Wage gap between white and black Americans is worse today than in 1979", The Guardian, August 2016 https://www.theguardian.com/us-news/2016/sep/20/wage-gap-black-white-americans (Last accessed: August 22, 2017)

African American respondents feel they have successfully moved up the career ladder, while 50% think they have not been successful in moving up in their careers and feel stuck in their current positions. This differs greatly from 52% of white respondents and 58% of Asian respondents that feel they have successfully moved up the career ladder.

Several factors may explain the dissatisfaction African American solar employees feel regarding their career growth. Nationally, individual prejudices and conscious or unconscious biases are cited as factors impacting career growth of women and people of color. A Yale University study shows that even scientists who are trained to be objective, regardless of their gender, are likely to hire men, rank them higher in competency than women, and pay them $4,000 more per year than women.[22] One African-American female respondent gave an account of how she was promised a pay increase that was not fulfilled while another white supervisor was given a raise in the same timeframe, which she perceived as racial bias.

Numerous studies also point to the emotional stress women and people of color face when working in a predominantly white firm. People of color and members of the LGBTQ community must constantly work toward countering stereotypes. This problem is exacerbated by a lack of mentors and sponsors of the same racial and gender make-up that can provide support and help navigate the rungs of the career ladder.[23] A recent study by the Society of Women Engineers details obstacles women and people of color face. In this survey, 61% of women and 68% of engineers of color (both male and female) reported they must prove themselves repeatedly to gain the same levels of respect and recognition as their colleagues, compared to only 35% of white men reporting the same.[24]

FACTORS LEADING TO CAREER SUCCESS

While a wide variety of factors have led to career success among survey respondents, in-person networking, self-guided learning and experimentation, on the job training, informal mentors, acquisition of bachelor's degree or higher, and support from family and friends are cited as top contributors to such success. Respondents also cited networking, both informal and formal, organizational awareness (including understanding of company culture), and workplace relationships as other important factors for career advancement.

Eighty-six percent of solar workers believe that they fit in and are valued by their coworkers. Most respondents rate hard work and/or dedication, networking and/or connections, and willingness to learn as top factors in career success. Mentors and/or support networks and past industry experience are also important factors.

RESPONDENTS' VIEWS ON MENTORSHIP/SPONSORSHIP

Sixty-six percent of the survey respondents have served as a mentor, sponsor, or both. Among different races, more Asians (63%) and African Americans (67%) have served as mentors/sponsors in the past compared to white respondents. While most of the respondents value the role of mentors and sponsors, 56% of all respondents do not currently have a sponsor or a mentor. Overall, women are less likely than men to serve as mentors or sponsors as shown in Figure 8. 52% of women responded that they have never served as a mentor or sponsor versus only 38% of men.

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22 Wilkie, Dana, "Tips for Rooting Out Hidden Bias", Society for Human Resource Management, December 1, 2014, https://www.shrm.org/hr-today/news/hr-magazine/Pages/1214-hidden-bias.aspx (Last accessed: August 28, 2017)

23 "Being Black—but Not Too Black—in the Workplace", The Atlantic, October 14, 2015 https://www.theatlantic.com/business/archive/2015/10/being-black-work/409990/ (Last accessed: August 22, 2017)

24 Williams, John C., Li, Su, Rincon, Roberta et al., "Climate Control: Gender And Racial Bias In Engineering?", Society of Women Engineers, http://research.swe.org/wp-content/uploads/2016/08/16-SWE-020-Work-Study-10_20_16-CP.pdf (Last accessed: August 27, 2017)

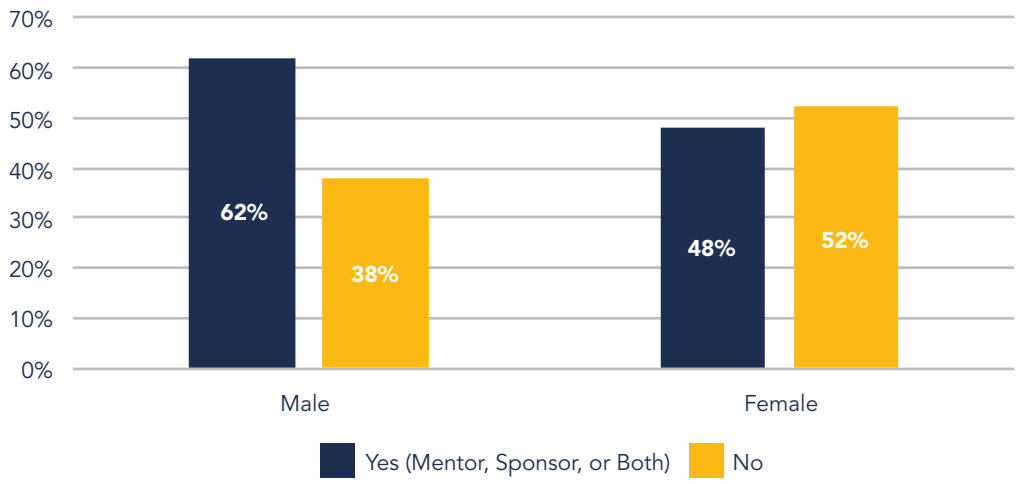

Figure 8: Experience Serving as Mentor by Gender

The gaps in mentorships between men and women are reduced at management positions. As shown in Figure 9, 64% of female respondents at the MDP level serve as mentors or sponsors, compared to 59% of men serving as mentors in MDP positions. This data point shows that women are more likely to feel qualified to serve as a mentor when they reach the level of manager of above. However, men are likely to feel equipped to serve as mentors earlier on in their careers. Another explanation could be on how men and women define mentorship. While women may give career advice to their colleagues or peers on an informal basis, they may not label it as mentorship.

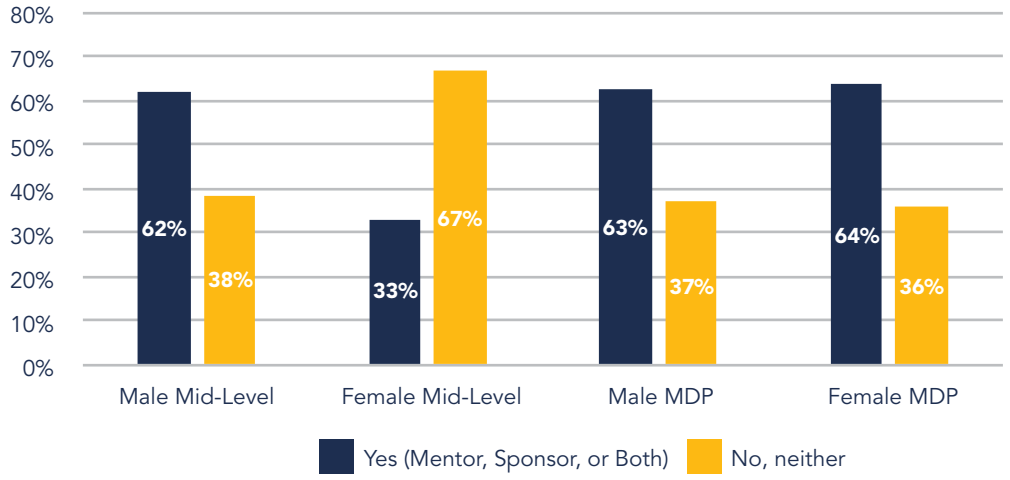

Figure 9: Experience Serving as Mentor by Gender and Job Title

Although women are less likely to serve as mentors overall, 50% of female respondents consider mentorship "very important" versus 32% of male respondents. Hispanic or Latino respondents are also much more likely to value mentorship. 62% of Hispanic or Latino respondents rated mentorship as "very important" versus 40% of non-Hispanic respondents.

INCREASING DIVERSITY

As shown in Figure 10, to increase diversity, respondents indicated companies should show up at and reach out to communities where diverse candidates are likely to live and work, and establish community-focused recruiting efforts. Respondents also recommended extending and strengthening training programs to prepare employees for the next step in their careers, and to increase understanding of diversity.

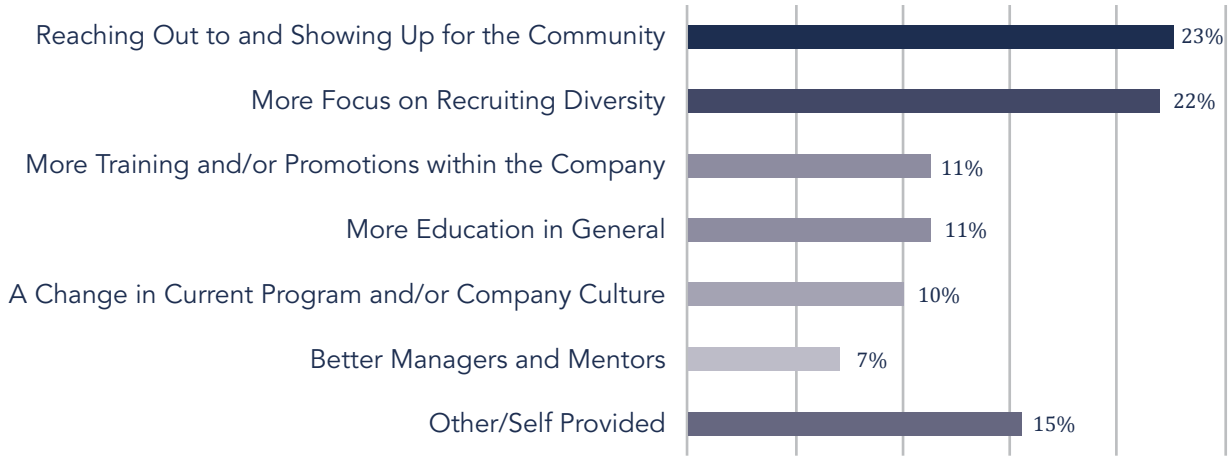

Figure 10: Improving Solar Company Diversity Programs

Employer Survey Findings

RESPONDENT PROFILE

375 company representatives completed the employer survey. Of these, 30% represent solar installation firms, 17% project developers, 10% solar manufacturers, and 6% sales and distribution firms. For analytical purposes, the research team organized these groups into *upstream companies*, or manufacturing and sales and distribution firms; and *downstream companies,* or installation and project development firms. As such, 47% of survey respondents were categorized as downstream firms and 16% were categorized as upstream companies. All other employers were categorized as "other", comprising 37% of all respondents. Of our 375 employer survey respondents, 41% were small companies, 36% were medium companies, and 23% were large companies.

TRACKING DIVERSITY

Approximately over a quarter of all solar employers formally track employee diversity, 47% of employers do not formally track employee diversity, and 25% do not know the answer and/or refused to answer, as shown in Figure 11.

When examining types of firms, downstream firms are slightly more likely to track diversity than upstream firms (27% of downstream firms versus 25% of upstream firms). Companies in the "other" category are most likely to track diversity metrics, at 35%. Perhaps unsurprisingly, large firms are most likely to formally track diversity metrics (48%), likely due to a greater availability of resources. On the other hand, only 22% of medium firms and 19% of small firms track diversity.

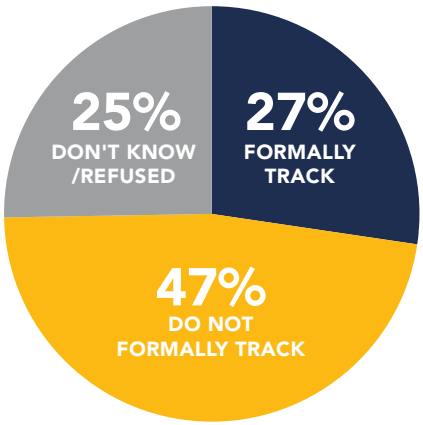

Figure 11: Solar Firms that Formally Track Employee Diversity

DIVERSITY PROGRAMS AT FIRMS

In terms of specific programs to promote advancement and diversity, 41% of employer respondents have mentorship/sponsorship programs. However, as shown in Table 1, only 14% have a strategy in place to increase female representation, 7% have a strategy in place to increase representation of people of color, and 11% have a strategy to increase the representation of veterans. Although the Solar Energy Industries

Anbu Varatharajan and Durga Nallathambi, owners of the 5,000th Oregon home to install solar power with help from Energy Trust

Energy Trust of Oregon: Calling All Perspectives

PORTLAND, OREGON

Energy Trust of Oregon, a non-profit that provides energy efficiency and renewable energy information, cash incentives, and services to Oregon utility customers, is striving to create a more equitable, diverse, and inclusive organization to effectively serve its existing and expanding customer base. That's why the organization prioritizes expanding participation in its five-year strategic plan, annual budgets, and action plans.

Energy Trust's goal is to weave diversity into who they are and how they conduct their business so that they increase opportunities for engagement and participation by underserved communities. Energy Trust has established a diversity, equity, and inclusion (DEI) initiative through which it is developing DEI goals, an action plan, and a DEI lens to apply to internal systems, processes, and programs.

Other specific actions underway include establishing a board level policy on diversity, equity, and inclusion, and engaging community-based organizations to help inform and advise the organization on its strategies. Energy Trust is planning strategies that aim to increase participation of women- and minority-owned businesses in its Trade and Program Ally Network in 2018, and is prioritizing efforts to recruit and retain diverse employees and contractors who can offer a range of perspectives, experiences, skills, and ideas. The organization's DEI initiative focuses on three key areas: organizational development, business operations, and market and customer insights.

Importantly, Energy Trust will guide its efforts through research, community engagement, and additional data collection. The organization has begun conducting focus group and survey research to better understand the characteristics of customers who have participated in its programs and those customers who have not yet participated. These efforts will shape marketing, outreach, communications, and customer service tools.

Learn more at www.energytrust.org.

CASE STUDY

Association (SEIA) has made an industry commitment to hire 50,000 veterans by 2020, veteran hiring strategies have not spread across the wider industry.

Promotion of Diversity & Advancement	All Solar Firms	Upstream Firms	Downstream Firms	Other Firms	Small Solar Firms	Medium Solar Firms	Large Solar Firms
Formal Diversity Tracking	27%	25%	27%	35%	19%	23%	48%
Mentorship/ Sponsorship Program	41%	25%	45%	38%	31%	47%	46%
Strategy to Increase Female Representation	14%	12%	15%	14%	13%	9%	23%
Strategy to Increase Minority Representation	7%	7%	7%	10%	5%	8%	10%
Strategy to Increase Veteran Representation	12%	9%	13%	7%	8%	11%	19%

Table 1: Promotion of Diversity and Advancement by Solar Firm Type and Size

As seen in Table 1, downstream firms are more likely than upstream firms to have these types of programs. Large firms are significantly more likely than medium and small firms to implement strategies to increase the representation of women, people of color, and veterans on their payrolls. For more granular information on size and type of solar firms, please see the appendix.

RECRUITMENT EFFORTS

Solar companies still struggle to find qualified workers overall, especially for installer and sales positions. According to the *National National Solar Jobs Census 2016*, 80% of solar companies indicated that it is at least "somewhat difficult" or "very difficult" to find qualified candidates.[25] As shown in Figure 12, companies most commonly prefer to post jobs on sites such as Indeed, Monster, etc. Following this, word of mouth and online media were noted as the next preferred methods for recruiting. While these methods are often easiest to use and have the widest reach, they may miss the mark in attracting diverse candidates. Similarly, if certain demographics are not part of a company's social media and network, they are less likely to be aware of possible job openings.

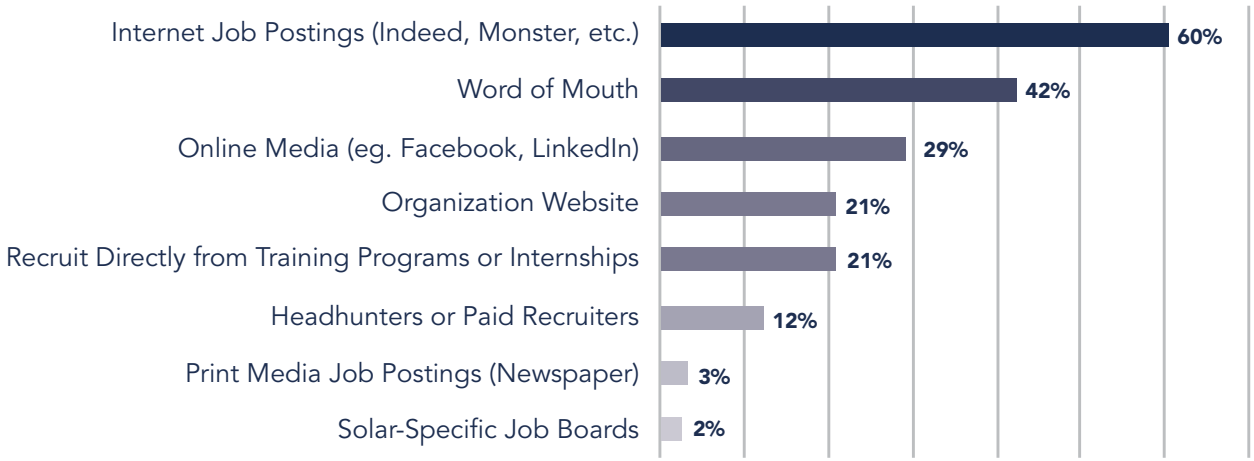

Figure 12: Preferred Methods of Recruiting Candidates

25 National Solar Jobs Census, The Solar Foundation, 2016, http://www.solarjobscensus.org (Last Accessed: September 1, 2017)

EXPANDING DIVERSITY EFFORTS AMONG THIRD-PARTY RECRUITERS

This study researched the diversity commitments of the most popular online job sites as well as third-party recruiters that serve the solar/clean energy markets. Monster, LinkedIn, and CareerBuilder have made commitments to diversity and inclusion. However, out of the dozen energy-focused recruiting firms researched, only one had a commitment to diversity, and another firm made their website accessible to Spanish-speaking individuals.

While there is limited research on diversity practices among third-party recruiters, solar companies should work with firms that have an equal opportunity policy as well as demonstrate support for diversity in their outreach and recruiting methods. As one recruiter suggests, companies should review how recruiting agencies "map" the market.[26] This means paying close attention to methods, tools, networks, and geographic targets recruiting firms utilize to search for candidates. Moreover, solar companies must clearly convey their goals and commitment to diversity to ensure that the recruiters respect and work towards meeting a company's diversity goals.

Comparisons to Other Industries

Even though the solar industry has a lot of room to improve diversity, in many cases, it fares better than other industries. The solar industry is more diverse than the construction, oil and gas extraction, and the utilities industry, as shown in Table 4.[27] However, the manufacturing and information sectors[28] beat the solar industry in terms of overall diversity.

Many of the challenges related to diversity, advancement, career support, and opportunities identified by survey respondents may be reflective of the solar industry's position in the early growth stage of its industry life cycle. The solar industry is dominated by early stage startups and small- to medium-size firms. Smaller organizations are less likely to have the resources to offer programs and support processes related to career advancement and diversity that are often commonplace in larger firms. Although the industry's maturity stage may play some role, the limited progress of diversity in the solar industry may be attributed to similar obstacles and biases that women and people of color face in other industries.

Even so, the solar industry is already more inclusive than comparable industries. For example, compared to utilities, all demographics except for African Americans are employed at higher numbers. African Americans are not as prominent in the solar industry as they are in other leading industries such as manufacturing and information. As shown in Table 4 below, of all ethnic groups, Asians and Hispanics or Latinos are employed at higher numbers in the solar industry. Employment of Hispanics or Latinos in the solar industry is rivaled only by the construction industry. Oil and gas extraction still employs the most veterans.

Solar is a young industry in terms of the age of the employees. On average, only 11% of the solar workforce is 55 years old or older compared to 22%[29] of the overall U.S. workforce.

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26 Kiasos, Theaanna, "Diversity Recruitment: Practical Tips, Diversity First PTY Limited", November 18, 2016 https://www.linkedin.com/pulse/diversity-recruitment-practical-tips-theaanna-kiaos (Last accessed: August 23, 2017)

27 QWI Explorer, U.S. Census Bureau Center for Economic Studies, https://qwiexplorer.ces.census.gov/static/explore.html#x=0&g=0 (Last Accessed September 25, 2017)

28 The Information sector comprises establishments engaged in the following processes: (a) producing and distributing information and cultural products, (b) providing the means to transmit or distribute these products as well as data or communications, and (c) processing data. https://www.bls.gov/iag/tgs/iag51.htm (Last accessed: August 26, 2017)

29 "Employed persons 18 years and over by industry, class of worker, sex, veteran status, and period of service, 2016 annual averages," Bureau of Labor Statistics, March 22, 2017 https://www.bls.gov/cps/cpsaat18.htm (Last accessed: August 23, 2017)

Demographics	Solar	Overall U.S. Employment	Construction	Manufacturing	Oil and Gas Extraction*	Utilities	Information
Female	28%	48%	18%	29%	17%	24%	39%
Male	72%	52%	82%	71%	83%	76%	61%

Demographics	Solar	Overall U.S. Employment	Construction	Manufacturing	Oil and Gas Extraction*	Utilities	Information
Hispanic/Latino	17%	16%	18%	14%	16%	9%	10%
Non-Hispanic	83%	84%	82%	86%	84%	91%	90%

Demographics	Solar	Overall U.S. Employment	Construction	Manufacturing	Oil and Gas Extraction*	Utilities	Information
Asian	9%	5%	2%	6%	2%	3%	7%
Black or African American	7%	13%	7%	10%	5%	9%	11%
White	74%	79%	88%	81%	90%	85%	79%
More than One Race	8%	2%	2%	1%	1%	1%	2%

Demographics	Solar	Overall U.S. Employment	Construction	Manufacturing	Oil and Gas Extraction*	Utilities	Information
Veterans of U.S. Armed Forces	9%	7%	9%	10%	14%	9%	6%
Non Veterans	91%	93%	91%	90%	86%	91%	94%

Demographics	Solar	Overall U.S. Employment	Construction	Manufacturing	Oil and Gas Extraction*	Utilities	Information
55 or Older	11%	22%	21%	26%	23%	29%	19%
Younger than 55	89%	78%	79%	74%	77%	71%	81%

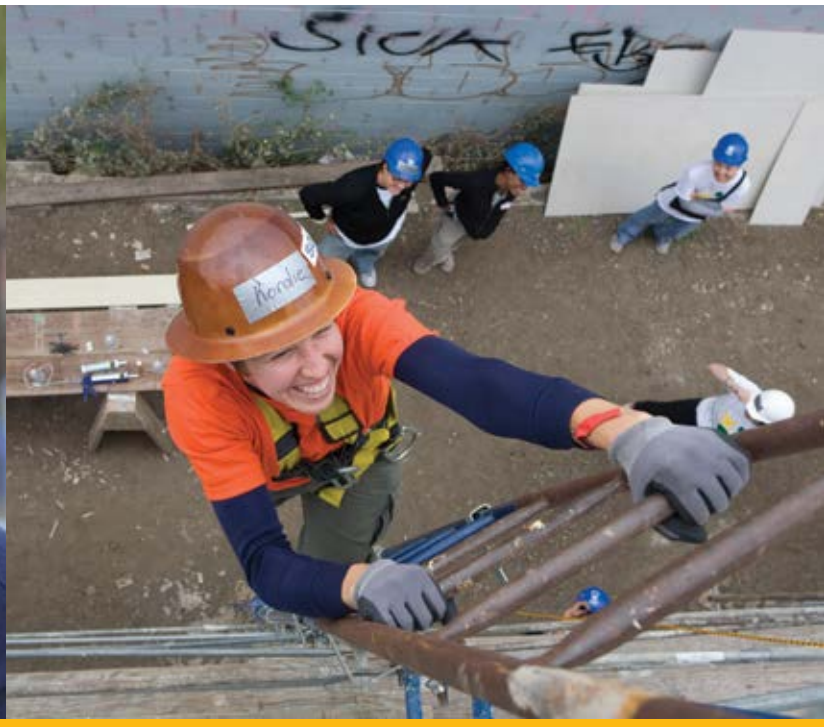
*Mining, quarrying, and oil and gas extraction

Tables 2-6: Diversity in the Solar Industry in Comparison to Other Industries

Sources: "Employed persons 18 years and over by industry, class of worker, sex, veteran status, and period of service, 2016 annual averages," Bureau of Labor Statistics, March 22, 2017 https://www.bls.gov/cps/cpsaat18.htm

National Solar Jobs Census, The Solar Foundation, 2016, http://www.solarjobscensus.org

QWI Explorer, U.S. Census Bureau Center for Economic Studies, https://qwiexplorer.ces.census.gov/static/explore.html#x=0&g=0



Sunrun: Building a Belonging Culture

SAN FRANCISCO, CALIFORNIA

Sunrun is the largest dedicated residential solar, storage and energy services company in the United States. As one of the nation's leading solar installers, Sunrun is a company that helps to set the pace for the solar industry. Sunrun is currently focused on ensuring that its workforce reflects the diversity of its customer base.

Sunrun has been successful at hiring from diverse communities in recent years, but in the summer of 2017 the company decided to make a more deliberate commitment to this work by establishing an entire human resources group focused on the topic. The company's new Diversity and Inclusion team focuses on "diversity-intentional" recruiting and proactively identifying diverse talent by meeting diverse communities where they are, whether that be at a Historically Black College or University, or a military base recruiting fair, as well as creating inclusive professional development opportunities for Sunrun employees.

The Diversity and Inclusion department is particularly focused on creating a "belonging culture" in order to support employee retention levels. That starts with Sunrun's broader human resources team, which includes employees of diverse races, ages, genders, and backgrounds. After employees join Sunrun, they are encouraged to join employee resource groups that are open to colleagues from their background as well as any colleague who considers themself to be an ally to those groups. An additional Sunrun initiative is the creation of the Diversity & Inclusion working group, spearheaded by Sunrun's Public Policy and Human Resources teams. The group's mission is to help advance Sunrun's commitment to developing and valuing a culture of diversity, equity and inclusion. This commitment is demonstrated both internally, among Sunrun employees, and externally, through partnerships with key stakeholders. Sunrun also proactively seeks opportunities to create and implement corporate policies that support a culture of belonging.

At Sunrun, improving diversity and inclusion is purposeful and intentional work to create a more supportive workplace for employees and to help the company to better realize its mission to extend the benefits of solar power to all. Learn more at www.sunrun.com.

CASE STUDY

Best Practices

To better guide the solar industry on steps it can take to become more inclusive, it is beneficial to understand the best practices in other industries. As this report is a living document, proven efforts from other industries can serve as a guidepost for the solar industry. The research team also utilized existing sources within the industry, including SEIA's Diversity Best Practices Guide for the Solar Industry"[30] as well as Women of Renewable Industries and Sustainable Energy (WRISE)'s top ten areas renewable energy companies can focus on to increase diversity and inclusion.[31]

Several studies recommend strategies and programs that have shown results in increasing workplace diversity. All studies advocate for a "multidimensional solution" which focuses on promoting a diverse range of thinking, experiences and backgrounds as opposed to simply meeting a quota.[32] A multi-dimensional approach may include a tiered system based on the availability of resources and human capital. As a first step, companies must begin by providing training on diversity and inclusion related topics for all employees. To attain best results in establishing a diverse workforce, companies should undertake three core steps:

1. **Create a range of diversity and inclusion positions that span multiple departments.**
   As companies mature in their understanding of diversity and inclusion, the next effort should focus on establishing positions that are wholly dedicated to increasing diversity. Following this, companies should broaden efforts to increase diversity across all departments, not just in HR. A study by the Society for Human Resource Management (SHRM) shows the low percentage of specialized positions within departments and the centralization of diversity inclusion within one department often leads to consolidated and one-dimensional diversity programs.[33] Therefore, efforts to increase diversity should be integrated in all departments. The study recognized that small organizations might not have the resources to create such positions within the company, thus recommending volunteer opportunities, educational trainings, and advisory committees as an alternative for smaller firms with smaller budgets.[34]
2. **Form networking opportunities/programs for everyone.**
   Creating networking programs is vital for people of color to strengthen their professional growth and career prospects. These networking opportunities should focus on informing on company's mission and the range of professional opportunities within the company. These events can be mutually beneficial as they give the company a chance to revamp their mission statement while also recruiting new employees that can target a new consumer base.[35] Ernst & Young, one of the largest accounting firms in the country increased the number of minority employees by 79% in 10 years by creating networking events that catered to the potential new hires' needs. These events matched new employees of color with current employees with similar backgrounds to develop a mentor-mentee relationship.[36]
3. **Train current employees on diversity practices.**
   Diversity strategies also prove to be most successful when they engage managers in solving problems, increase everyday contact between managers and employees that are women and of color, and encourage managers to publicly display that they are fair-minded and non-discriminatory.[37]

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30 "Diversity Best Practices Guide for the Solar Industry", Solar Energy Industries Association, November 2016, http://www.seia.org/sites/default/files/resources/SEIA%20Diversity%20Best%20Practices%20Guide_nocrops_0.pdf (Last accessed: September 7, 2017)

31 "Corporate Diversity," Women of Renewable Industries and Sustainable Energy, http://wrise.drop1.edgeworksgroup.com/careercenter/corporate-diversity/ (Last Accessed September 7, 2017).

32 "Leaders in Diversity and Inclusion: 5 Lessons From Top Global Companies", Aperian Global, December 3, 2015 http://www.aperianglobal.com/leaders-diversityinclusion-5-lessons-top-global-companies/. (Last accessed: August 22, 2017)

33 "SHRM Survey Findings: Diversity and Inclusion, Society for Human Resource Management, August 8, 2014 https://www.slideshare.net/shrm/shrm-2013-surveyfindings-diversity-inclusion-v5 (Last accessed: August 22, 2017).

34 Ibid

35 "Diversity Primer", Diversity Best Practices, September 29, 2009 http://www.diversitybestpractices.com/publications/diversity-primer. (Last accessed: August 22, 2017)

36 "A Diverse and Inclusive Workforce" Ernst and Young http://www.ey.com/us/en/about-us/our-people-and-culture/diversity-and-inclusiveness (Last Accessed September 3, 2017)

37 Kaley, Alexandra, Dobbin, Frank et al. "Why Diversity Programs Fail", Harvard Business Review, July-August 2016 https://hbr.org/2016/07/why-diversity-programsfail (Last accessed: August 22, 2017)

Recommendations

The following recommendations are intended for all solar firms, regardless of size. While some firms may have an advantage in terms of resources, time, and human capital, there is still a great deal that small and medium-sized firms can undertake. Companies that are in the rapid growth phase should include diversity as one of their foundational pillars to impact company culture for years to come.

1. **Define what diversity means for your company and why it matters.** Companies must be open and authentic in their treatment of diversity and what it means to them. This messaging should be communicated via various platforms, such as establishing a company web page that outlines a diversity statement and goals, and placing diversity posters in multiple locations in an office, as well as including diversity efforts in the annual report and other corporate materials such as a company brochure. One respondent noted the importance of changing the narrative where diversity is viewed as a source of competitive advantage as opposed to an HR issue to be addressed. Other respondents recommended "making diversity a part of every conversation", and being "intentional and mindful" about promoting diversity at a company.

   Some companies have gone beyond the archetypal language to reflect their company's culture and make their message authentic. For example, the giant retail chain Target demonstrates its commitment to diversity using the following language:

   > *We believe diversity and inclusivity make teams and Target better. And we'll live that belief as champions of a more inclusive society by creating a diverse and inclusive work environment, cultivating an inclusive guest experience, and fostering equality in society.*[38]

   Similarly, Sodexo, a leading provider of quality of life services, uses the following statement to describe its commitment to diversity and inclusion:

   > *Diversity and inclusion differentiates us in the marketplace and contributes to a culture of inclusion in the workplace. It drives our ability to identify and develop the best talent, create an engaged and committed workforce and enhance Quality of Life for our clients, customers and the communities we serve. Our commitment to diversity and inclusion promotes growth within Sodexo and cultivates external partnerships.*

   Both of these statements echo the companies core values and at the same time emphasize their genuine commitment to diversity and the value it adds to their businesses.

2. **Provide training to create and encourage an inviting work environment.** Training should be provided to managers on best practices pertaining to performance reviews, professional development, career pathways, and mitigating unconscious/conscious biases as it relates to women and people of color. One of the survey's African American female respondents noted that very few of the qualified African American candidates she referred to her employer were selected for interviews. Situations such as these can only be eliminated with continuous training on mitigating conscious/unconscious biases. Moreover, companies should collect periodic feedback from all employees about job satisfaction and barriers they may face. These results should be shared with the executives in the organizations to correct areas in need of improvement or intervention.

38 "Diversity and Inclusion," Target Corporate Responsibility, https://corporate.target.com/corporate-responsibility/diversity-inclusion (Last Accessed: September 20, 2017)

GRID Alternatives: Empowering Women for Solar Careers

OAKLAND, CALIFORNIA

GRID Alternatives aims to extend the benefits of solar power to some of our nation's most underserved and energy-burdened communities. GRID envisions a transition to clean energy that leaves no one behind.

GRID's job training programs address diversity across both race and gender, providing pathways for individuals of all backgrounds to pursue solar careers. For example, the organization has sought to improve the experience of trainees on its builds through small but meaningful changes like providing safety equipment—including harnesses and gloves—for a broad range of body sizes and types and adapting its safety talks to include language that acknowledges both physical and emotional safety. These efforts have helped to increase for the organization's internal diversity as well: GRID has employed as many as 12 female NABCEP-certified PV Installation Professionals on its team.

GRID tracks its demographic numbers across its staff and all of its programs and has made equity a top organizational priority both internally and in its programmatic work. It remains a work in progress that requires constant evaluation and ongoing investments both from leadership and staff members.

Learn more at www.gridalternatives.org.

CASE STUDY

3. **Establish a tracking and measurement system which has commitment from all levels of a company, starting at the CEO's office and continuing down to each entry-level employee.** As one respondent noted, "programs that separate intention from results should be promoted, noting that intention is not enough when systemic and industry-wide diversity imbalances exist." Moreover, the promotion of diversity should not be left to women and people of color, but should be given center-stage and unified support from everyone, regardless of gender, ethnicity, or other demographics. Likewise, male and female CEOs should utilize data on the value of diversity to a business's bottom line and integrate it in a company's corporate culture.

   While smaller companies are challenged by limited resources, creating a simple spreadsheet that is updated quarterly is a very cost-effective and efficient way to track diversity. Moreover, companies can add another layer by establishing a system that tracks diversity metrics from the application submission stage to the retention stage. An effective system will track annually various demographics from application submission to the interview process to job offer and onboarding, and retention.

   Quantitative metrics should be coupled with qualitative data collection. Companies should undertake "employee climate surveys" intended to gauge satisfaction levels among all employees on their work environment, their performance and support they receive from their supervisors, and the overall corporate cultures. Often, anecdotal accounts shed light on valuable data that quantitative data miss.

4. **Create mentorship/sponsorship opportunities.** Many respondents indicated having informal mentors from within the company who were often their immediate supervisors or other individuals in leadership roles. While most had informal mentors, and recognized the value of these resulting in deeper and personal ties, best practices suggest establishing formal mentorship programs especially for individuals that may be uncomfortable or unsure of how to seek out mentors or sponsors. Some women and people of color may also prefer a formal and structured mentorship program. Respondents recommended establishing objective work assignments that challenge employees and set them on a clear path to career growth as well as establishing annual goals and guiding employees to achieve them. Respondents also noted that any kind of one-on-one mentorship program is more useful than paid conferences, training, or seminars that touch on career growth and advancement.

5. **Offer networking opportunities.** Companies should organize multiple networking opportunities to encourage all individuals to network with each other, especially with those different than them. This effort can result in better working relationships and a greater level of cultural understanding among employees. Smaller companies should partner with other companies as well as affinity groups to offer networking opportunities. The Solar Energy Industries Association (SEIA) does a good job of organizing regional solar events with multiple networking opportunities. A component of these events could be dedicated to diversity as some of them already do. Finally, companies should encourage their employees to form personal and professional connections, both within the industry and externally. Expanded networks hold great value for both companies and employees.

6. **Improve and expand recruitment efforts among different demographics and at all levels.** One respondent noted, "hiring managers who find candidates via their

network often fail to see their rolodex are very reflective of themselves…". To mitigate this, another respondent advised, "fish where the fish are." Partnering with institutions and organizations that predominantly serve women and people of color can significantly increase the pool of qualified applicants. For example, partnering with Historically Black Colleges and Universities, Hispanic serving colleges, and other organizations can inform talented individuals on the opportunities offered by the solar industry. Similarly, partnering with religious institutions and community centers that largely serve people of color can also attract candidates.

The solar industry must work directly with underrepresented populations, beginning at the middle and high school levels. Focus should be on increasing the level of understanding on career pathways that exist in the solar industry and the applicability of various fields of study. Our findings suggested that a significant number of solar workers fell into the solar industry by accident. Establishing a structured recruitment program for all levels of the educational system will prepare students from all walks of life to consider solar as a career option.

Moreover, the solar industry should partner with Workforce Investment Boards (WIBs) and other workforce development organizations to adopt best practices in attracting, recruiting, and retaining women and people of color. For these efforts to be effective, outreach and messaging should differ among the target audience. As respondents noted, advice for experienced job seekers should vary from less experienced job seekers who may benefit most from understanding how their previous experience and/or qualifications are applicable to the solar industry. Similarly, companies should inform new job seekers of the myriad of ways they can work in solar without being an electrician or installer. Jobs in sales, education/outreach, and advocacy may potentially hold a wider appeal for new job seekers and should be presented. Creating case studies that get these variety of messages across is beneficial.

Another respondent pointed to an equally important issue of the "missing middle". While companies may have programs, or may establish new programs to hire diverse candidates for entry-level positions, programs to attract diverse talent at the mid-to-top level positions are crucial. As our data shows, the gaps for people of color exist at the mid-level and, most importantly, at the executive level. Companies should make thoughtful efforts to align corporate goals and objectives with career and professional advancement for people of color. Companies should be able to form a pipeline of workers from which talent can be enlisted for top positions. Building a pipeline of workers will also address the mentorship gap so that there is a good number of mentors that are of color to guide emerging leaders like them.

7. **Strengthen entrepreneurial programs for disadvantaged populations.** Organizations that serve the solar industry such as GRID Alternatives, Greenlining Institute, etc. should strengthen entrepreneurial programs for disadvantaged populations. As data shows, 50% of solar companies are small firms, often implying that they are recent start-ups. Without adequately equipping women, people of color, veterans, and LGBTQ members with tools and know-how that get them on a path of being an entrepreneur, they likely will miss the chance to benefit from the opportunities the solar industry offers. While focusing on diversity and inclusion efforts in companies is crucial, directing focus on the entrepreneurial side can offer great openings to establish economic growth models for various demographics.


MIGUEL

Take Action

Since solar is a continuously evolving industry, now is the time to increase focus on diversity and inclusion. The research team, in consultation with SEIA's Women's Empowerment Committee, recommends these five actions that can be implemented over the next year.

1. **Create company-wide diversity pledges with formal adoption at the executive level.** These pledges should be backed by a well-planned execution strategy. Companies should post their diversity pledges on their company website and hold information sessions for their employees reiterating the company's commitment to diversity. Similar pledges were made by 30 technology companies such as American Express, Barilla, and Cargill, just to name a few, in 2016. Companies can also join the national CEO Act on Diversity and Inclusion[39] pledge to publicly display their commitments to diversity and inclusion.

2. **Establish a formal diversity tracking and measurement tools and tie it to company performance metrics.** This applies to all companies regardless of size and geographic location and should tie to the company's other performance metrics such as sales target, customer acquisition, market penetration, revenues, etc. Any tracking tool should emphasize both quantitative information--which can include information such as number of employees by gender, age, ethnicity, veteran status, sexual orientation, etc. as well as qualitative data, like level of satisfaction with the company's diversity efforts. A good way to collect qualitative data is through conducting "employee climate surveys" which can provide valuable information on diversity programs that are working well and those that require attention or improvements. These questions can range in topics such as trust, transparency, professional growth, feeling of inclusiveness, etc. Any tracking and measurement tool should be free from the influence of management and senior level executives and must be operated independently to ensure transparency. The company's objective should be to establish a baseline and measure progress over time. For small companies, a tracking tool can be a simple spreadsheet that is organized by various tabs denoting time. Simultaneously, companies should track the impact of diversity on its performance goals and how diversity is impacting their performance goals.

3. **Broaden job posting sites and in-person recruitment locations.** Our survey responses showed that the top sources where job openings are posted are through job sites such as CareerBuilder, Indeed, or Monster, and by word of mouth. Even though these job sites are intended to be accessible to anyone, ability to access may not be equal. Individuals from lower socioeconomic backgrounds may lack access to a computer or internet or lack knowledge of these sites. Similarly, word of mouth may leave out many demographics that are not already part of the network. To eliminate this barrier to entry for people of color, veterans, members of the LGBTQ communities, and other demographics, companies should expand their existing networks. For example, to increase African American candidates, reaching out to predominantly black colleges and universities, churches and other religious organizations, and community centers could be a major step forward. Likewise, to reach more Hispanic or Latino candidates, reaching out to Hispanic-Serving colleges would be a helpful start.

   Another way to increase outreach is to work with organizations that have fellowship programs that provide training to youth seeking careers and to post jobs with workforce development organizations that train people for solar jobs.

39 The CEO Action for Diversity & Inclusion™ is the largest CEO-driven business commitment to advance diversity and inclusion within the workplace. Learn more at https://www.ceoaction.com/about/.

Alpha Solar Group: Take the Leap

WASHINGTON, D.C.

When Shelley Cohen of Alpha Solar Group first approached a colleague in the solar industry to discuss her interest in starting a company, she asked him if he thought she could do it. "Come back to me when you're asking the right questions," he said. "Not if, but how." It was peer mentoring moments like this and supportive relationships with diverse partners—including a fellow woman in solar and a veteran of the armed forces—that helped to boost Shelley's confidence enough that she embraced the risks and struck out on her own.

One of Shelley's driving forces at that decision point was her belief that the solar industry needed to better reflect its customers through its workforce, including in executive level positions. Research shows that more work needs to be done to add diverse voices to boards of directors. Today, in addition to her role as the chief executive officer of Alpha Solar Group, she serves on the board of her local SEIA chapter. This position provides her with a platform to ensure that diversity is considered across the organization's programs and that the group's work is helping to make solar affordable and accessible for everyone.

As the owner of a small, woman-owned business, Shelley takes every opportunity to encourage her solar colleagues to look past their perceived boundaries, seek counsel and encouragement from others, and take the leap--whether that be applying for a role in senior management, starting a company, or shooting for a board position. Learn more at www.alphasolargroup.com.

CASE STUDY

Finally, companies should broaden in-person recruitment efforts outside the usual places such as colleges and universities to targeted places such as organizations that serve women and people of color. One effective strategy could be to incentivize existing employees of color to reach out to their networks and bring back names of candidates that can be trained for employment.

4. **Implement a "blind" job application review process.** Academic research suggests the potential for unconscious bias in application and resume review. Utilizing a blind process for resume review can eliminate this bias. Additionally, utilizing a committee of reviewers with a variety of backgrounds can also aid in ensuring a fair and objective review process. One respondent noted her company's pledge to interview at least one diverse candidate for all open positions as well as placing at least one diverse interviewer in the interview committee. Lastly, including language that explicitly promotes diversity in all job descriptions and on career opportunities webpages can further encourage individuals from many backgrounds to put forth their application. See below for sample language:

   Company A is an equal opportunity employer where an applicant's qualifications are considered without regard to race, color, religion, sex, national origin, age, disability, veteran status, genetic information, sexual orientation, gender identity or expression, or any other basis prohibited by law. We encourage individuals with diverse backgrounds to apply.

5. **Establish diversity training programs.** Diversity training should not only be designed to make a workplace more inclusive, but also to align the company culture with business goals. Moreover, any training program should be designed with long-term impacts in mind and not as a one-time event and should have clear objectives and goals. An effective training will include everyone in the company and address a multitude of topics. Using case studies and role-playing are effective ways to elicit responses that may otherwise not offered. Studies have shown that voluntary training is more effective than mandatory training, therefore it is imperative that the topic of diversity is embedded into a company culture to encourage participation.

Conclusion

Many of the findings in this study are disheartening and it is clear that the solar industry has a long way to go. However, the solar industry is outperforming many other industries and has the potential to achieve ambitious diversity goals. There has never been a better time than now. While the industry is yet young, companies can begin work today. The efforts should not stop at boosting the number of individuals from various backgrounds. Rather, the solar industry should commit to building a culture of diversity and inclusivity where all individuals, regardless of their gender, race, or sexual orientation, feel valued and appreciated, and receive equal opportunities to climb the career ladder.

While this report is focused on the traditional demographics, diversity should be encouraged in ideas and thoughts, political/religious views, academic backgrounds, and socioeconomic status. Companies reflect the communities they serve. If the vision is to make solar accessible to all people, change must begin with the companies and their workforce. Lastly, advancement of individuals with different backgrounds should be organic and authentic. It should not be driven by the politics of it but because it is the right thing to do.

This report is the first of its kind, setting a baseline for data on diversity in the solar industry. To better understand progress made, updated data should be gathered and analyzed on a regular basis. To track trends and measure change, it is The Solar Foundation's intention to work with the industry to release this study on an annual basis. In the next iteration of this report series, we will aim to survey even more employers and employees and analyze broader and more intersectional sets of data.

APPENDIX

	UPSTREAM SOLAR FIRMS		DOWNSTREAM SOLAR FIRMS		OTHER SOLAR FIRMS	
Demographic Category	Management Positions	Senior Executive Positions	Management Positions	Senior Executive Positions	Management Positions	Senior Executive Positions
Women	24%	17%	30%	25%	24%	17%
Latino or Hispanic	6%	4%	18%	9%	8%	8%
Asian	7%	6%	5%	4%	7%	7%
African American	2%	1%	6%	2%	2%	2%
White	85%	88%	78%	87%	88%	89%
More than One of the Above	5%	5%	3%	4%	3%	2%
Veterans of the U.S. Armed Forces	10%	10%	21%	17%	7%	8%
Older Workers (55+)	23%	32%	21%	40%	23%	34%

Appendix Table 1: Level of Position by Demographics and Firm Type

	SMALL SOLAR FIRMS		MEDIUM SOLAR FIRMS		LARGE SOLAR FIRMS	
Demographic Category	Management Positions	Senior Executive Positions	Management Positions	Senior Executive Positions	Management Positions	Senior Executive Positions
Women	22%	17%	20%	32%	32%	16%
Latino or Hispanic	8%	9%	8%	5%	16%	7%
Asian	6%	4%	4%	4%	6%	5%
African American	3%	2%	2%	1%	6%	2%
White	85%	87%	88%	90%	79%	86%
More than One of the Above	4%	4%	5%	5%	3%	4%
Veterans of the U.S. Armed Forces	10%	11%	12%	12%	17%	15%
Older Workers (55+)	35%	46%	21%	34%	20%	34%

Appendix Table 2: Level of Position by Demographics and Firm Size

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