Clean Energy Trends: Improving Diversity & Inclusion
Today’s speakers:

Andrea Luecke
President and Executive Director at The Solar Foundation

Kristen Graf
Executive Director at Women of Renewable Industries and Sustainable Energy (WRISE)

Tamika Jacques
Director at Workforce Development at the Massachusetts Clean Energy Center (MassCEC)

Maria Redmond
Director at Wisconsin Office of Sustainability and Clean Energy
Diversity and Inclusion in the Clean Energy Workforce

Andrea Luecke
President and Executive Director
The Solar Foundation
March 24, 2020
My Journey at The Solar Foundation

- Re-launched in 2010 as the first employee
- Focused on accelerating adoption of the world’s most abundant energy source
- Committed to a strong and diverse solar workforce
The Case for Diversity and Inclusion

Companies with diverse employees enjoy:
• Higher profits
• Broader market share
• Improved employee well-being than their less diverse peers

• Clean Energy Companies Benefit:
• Meet hiring needs by tapping into new/larger talent pools
• Build highly qualified teams and attract top talent
• Increased public awareness of the benefits of clean energy, leading to more sales and policy support
Solar Industry Demographics

Our annual *National Solar Jobs Census* found there are 250,000 solar workers in all 50 states.

- 26% Women (vs. 47% in overall U.S. workforce)
- 17% Hispanic or Latino
- 9% Asian
- 8% Black or African American (vs. 10% in overall U.S. workforce)
- 8% Veterans (vs. 6% in overall workforce)
Similar Challenges in Other Industries

• Overall, the electric power sector is 31% women, 19% Hispanic or Latino, and 7% Black or African American (U.S. Energy and Employment Report)

• Construction sector is 10% women, 6% African American

• Manufacturing is 29% women, 10% African American
U.S. Solar Industry Diversity Study

• Released May 2019; followup scheduled for this fall
• Surveyed employers and employees
• Big gender gap in wages, career advancement, and job satisfaction. Women make 74 cents on the dollar compared to men.

FIGURE 4: SOLAR SENIOR EXECUTIVES

<table>
<thead>
<tr>
<th></th>
<th>20% Women</th>
<th>6% Hispanic</th>
<th>5% Two or More Races</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>80%</td>
<td>94% Non-Hispanic</td>
<td>88% White</td>
</tr>
<tr>
<td>Women</td>
<td>20%</td>
<td>6% Hispanic</td>
<td>5% Two or More Races</td>
</tr>
</tbody>
</table>
Diversity tracking at solar companies

**FIGURE 16: FORMAL DIVERSITY TRACKING AT SOLAR FIRMS**

- Do Not Formally Track: 45%
- Formally Track: 36%
- Don’t Know/Refused: 19%

**PERCENTAGE OF FIRMS WITH A STRATEGY IN PLACE**

- **To Increase Representation of Women**
  - 2017: 7%
  - 2019: 22%

- **To Increase Representation of People of Color**
  - 2017: 14%
  - 2019: 24%
Women of Color in the Solar Industry

- Need to provide more evidence of competence
- Difficulty making the right connections
- Workplace microaggressions

“The solar industry relies too heavily on word of mouth when hiring and promoting. There is a direct correlation with promotion and who you know.”
The Path Forward

• Accountability and leadership, starting at the top
• Review procedures for hiring and recruiting
• Track employee demographics and satisfaction
• Encourage mentorship and networking
Companies Taking Action

- **Sunrun** achieved 100% pay parity for its employees.
- **McCarthy Building Companies** emphasizes local hires, prioritizes outreach to diverse candidates.
- **NEXTracker** set up a women’s network to support mentorships and networking around the globe.
Download the Full Report at: www.TheSolarFoundation.org/diversity

Andrea Luecke
President and Executive Director
The Solar Foundation
aluecke@solarfound.org

U.S. SOLAR INDUSTRY DIVERSITY STUDY 2019
New Resources on Diversity and Inclusion in the Solar Workforce

SEIA Solar Energy Industries Association
Women of Renewable Industries and Sustainable Energy

www.WRISEnergy.org  @WRISEnergy

Kristen Graf
Executive Director at Women of Renewable Industries and Sustainable Energy (WRISE)
Companies with three or more WBD in four of five years outperformed companies with zero WBD by 84%.

Companies with three or more WBD in four of five years outperformed companies with zero WBD by 60%.

Companies with three or more WBD in four of five years outperformed companies with zero WBD by 46%.
MIT Prof. Thomas Malone –
Center for Collective Intelligence

3 factors strongly correlated with better
group decision-making:

• The average social perceptiveness of the group
• The evenness of conversational participation
• The proportion of women in the group
Diversity Matters

Exhibit 1

How diversity correlates with better financial performance

Likelihood of financial performance above national industry median, by diversity quartile

<table>
<thead>
<tr>
<th>Diversity</th>
<th>4th quartile</th>
<th>1st quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender diversity</td>
<td>47%</td>
<td>54%</td>
</tr>
<tr>
<td>Ethnic diversity</td>
<td>43%</td>
<td>58%</td>
</tr>
</tbody>
</table>

+15%  +35%

SOURCE: McKinsey Diversity Database

The reverse is also true, companies in the bottom quartile in both gender and ethnicity underperformed the other three quartiles (Exhibit 2).
<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer discretionary</td>
<td>10.6%</td>
<td>11.0%</td>
<td>12.4%</td>
<td>13.4%</td>
<td>14.5%</td>
<td>15.5%</td>
</tr>
<tr>
<td>Consumer staples</td>
<td>13.3%</td>
<td>14.2%</td>
<td>14.9%</td>
<td>16.3%</td>
<td>16.9%</td>
<td>17.4%</td>
</tr>
<tr>
<td>Energy</td>
<td>6.7%</td>
<td>7.7%</td>
<td>8.3%</td>
<td>9.4%</td>
<td>10.8%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Financials</td>
<td>11.4%</td>
<td>12.0%</td>
<td>13.0%</td>
<td>14.8%</td>
<td>15.7%</td>
<td>16.9%</td>
</tr>
<tr>
<td>Health care</td>
<td>11.7%</td>
<td>12.4%</td>
<td>12.9%</td>
<td>14.1%</td>
<td>15.2%</td>
<td>16.5%</td>
</tr>
<tr>
<td>Industrials</td>
<td>7.8%</td>
<td>8.7%</td>
<td>9.9%</td>
<td>11.0%</td>
<td>12.3%</td>
<td>13.1%</td>
</tr>
<tr>
<td>Information technology</td>
<td>6.8%</td>
<td>7.7%</td>
<td>8.6%</td>
<td>10.0%</td>
<td>11.4%</td>
<td>12.2%</td>
</tr>
<tr>
<td>Materials</td>
<td>8.1%</td>
<td>8.4%</td>
<td>9.0%</td>
<td>10.9%</td>
<td>11.1%</td>
<td>11.6%</td>
</tr>
<tr>
<td>Telecoms</td>
<td>11.1%</td>
<td>11.0%</td>
<td>12.4%</td>
<td>14.2%</td>
<td>15.8%</td>
<td>17.1%</td>
</tr>
<tr>
<td>Utilities</td>
<td>10.6%</td>
<td>11.0%</td>
<td>12.0%</td>
<td>14.4%</td>
<td>14.3%</td>
<td>16.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9.6%</strong></td>
<td><strong>10.3%</strong></td>
<td><strong>11.3%</strong></td>
<td><strong>12.7%</strong></td>
<td><strong>13.7%</strong></td>
<td><strong>14.7%</strong></td>
</tr>
</tbody>
</table>

Source: Credit Suisse Research
WRISE Mission

To promote the education, professional development, and advancement of women to achieve a strong diversified workforce and support a robust renewable energy economy.
Institutional TOP TEN

- Data collection and tracking
- Goals and benchmarking
- Corporate culture
- Hiring and recruitment
- Pay and salary transparency

- Promotion, reviews and feedback
- Family/Life/Work integration
- Flexibility in work arrangements
- Career path
- Leadership pipeline
Institutional TOP TEN:

• Data
• Goals

• Corporate Culture – addressing implicit and explicit bias, internal education programs, engaging men in the conversation, and building valuable affinity networks

• Hiring and Recruitment
• Pay and salary transparency
• Promotion Reviews and Feedback
• Family/Life/Work Integration
• Flexibility in work arrangements
• Career path
• Leadership pipeline
We Help Companies Interrupt And Correct Implicit Bias In The Workplace
WHITE MEN AS
FULL DIVERSITY PARTNERS
INSPIRING COURAGEOUS LEADERS GLOBALLY
Key Takeaways

- The renewable energy workforce and highest decision-making tables still significantly lack women.

- More women and particularly women of color are desperately needed at all levels if we want to see successful and long-lasting results as an industry.

- Everyone has a role to play in building the workforce and the clean energy future we want and need.

WRISE and our amazing community of members, volunteers, sponsors, consultants and staff are here to make it happen.
Women of Renewable Industries and Sustainable Energy

www.WRISEnergy.org

@WRISEnergy

Kristen Graf
Executive Director at Women of Renewable Industries and Sustainable Energy (WRISE)
Our Mission

Grow the state’s clean energy industry while helping to meet the Commonwealth’s clean energy, climate and economic development goals.

INVEST

Invest in programs that increase renewable energy adoption by residents, businesses and communities.

CONNECT

Connect employers, job seekers, students, communities and investors to the clean energy industry.

INNOVATE

Help to spur innovation through infrastructure, funding and technology development support.
Our Emerging Initiatives

- Offshore Wind
- Energy Storage
- Microgrids
- Water Innovation
Our Workforce and Career Programs

Connecting job seekers and employers through internships, job and resume boards, and training programs
Demographics 2019: Massachusetts

### 2019 Clean Energy Jobs

<table>
<thead>
<tr>
<th>Category</th>
<th>Hispanic or Latinx</th>
<th>Black</th>
<th>Asian</th>
<th>Two or More Races</th>
<th>Women</th>
<th>Veterans</th>
<th>Workers Over the Age of 55</th>
<th>Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>19,229</td>
<td>8,359</td>
<td>9,888</td>
<td>9,607</td>
<td>33,473</td>
<td>12,294</td>
<td>15,714</td>
<td>8,284</td>
</tr>
</tbody>
</table>

### Percent of 2019 Clean Energy Workforce

<table>
<thead>
<tr>
<th>Category</th>
<th>Hispanic or Latinx</th>
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<th>Veterans</th>
<th>Workers Over the Age of 55</th>
<th>Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>17%</td>
<td>8%</td>
<td>9%</td>
<td>9%</td>
<td>30%</td>
<td>11%</td>
<td>14%</td>
<td>7%</td>
</tr>
</tbody>
</table>

### Percent of 2019 Overall MA Workforce

<table>
<thead>
<tr>
<th>Category</th>
<th>Hispanic or Latinx</th>
<th>Black</th>
<th>Asian</th>
<th>Two or More Races</th>
<th>Women</th>
<th>Veterans</th>
<th>Workers Over the Age of 55</th>
<th>Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>10%</td>
<td>8%</td>
<td>7%</td>
<td>1%</td>
<td>51%</td>
<td>4%</td>
<td>24%</td>
<td>14%</td>
</tr>
</tbody>
</table>
Clean Energy Internship Program

Paid internship opportunities for college students at Massachusetts-based clean energy companies

Successes to Date

• Placed over **3,800 interns** at **460+** companies since 2011
• Over **800 students** have gained full or part-time employment at their host companies
• **302 companies, 1,626 students** applied for the summer 2019 session
• Overwhelming **participant satisfaction** with the program to-date
• International students are eligible to participate.

Program Logistics

• Students and Employers apply via [www.masscec.com/internship](http://www.masscec.com/internship)
• 3 sessions per year. Summer 2020 session runs from May 16th to August 31st
• Companies may host up to **3 interns per session**
• Employers reimbursed for **12 weeks** of an intern’s work at the host company
• MassCEC reimburses employers at the conclusion of the session. Cap is **$3,840/intern** (spring/fall)
  **$7,680/intern** (summer)
Targeted Workforce Programs

- **Clean Energy Activity Day**
- **Learn & Earn**
- **Vocational Internship Program**
- **Building Operations (Late 2020)**
- **Successful Women In Clean Energy (Past Program)**
STATE EFFORTS TO IMPROVE DIVERSITY AND INCLUSION

MARIA REDMOND
DIRECTOR, WISCONSIN OFFICE OF SUSTAINABILITY AND CLEAN ENERGY

YALE CENTER FOR BUSINESS AND THE ENVIRONMENT
CLEAN ENERGY TRENDS, PART 2: IMPROVING DIVERSITY & INCLUSION
MARCH 24TH, 2020
THE JOURNEY AND PERSONAL OBSERVATIONS

- Maria Redmond – a quick career walk through from 1996-2020
- State Agency Energy Staff/Energy Sector Staff
- Growing Opportunities in Training, Education and Jobs
Mandela Barnes serves as Wisconsin’s 45th Lieutenant Governor. He is the first African-American to serve as a Lieutenant Governor in Wisconsin, and the second African-American to ever hold statewide office. In his current role, Lt. Gov. Barnes uses a platform of sustainability and equity to fight for solutions that invest in opportunities and fairness for every child, person, and family in Wisconsin, regardless of zip code.
STATE OF WISCONSIN LEADS BY EXAMPLE

- State Government Leaders push for greater equity, inclusion efforts from agencies
- Executive Order 1 - Prohibits Discrimination in State Employment, Public Services, and Contracting
- Executive Order 59 - Improves Diversity, Equity, and Inclusion in State Government
  - Requires state agencies to develop and implement equity and inclusion action plans
  - Calls for creating and providing mandatory equity and inclusion training for all state agency employees
  - Creates a diversity and equity advisory council
WISCONSIN’S GROWING OPPORTUNITIES

- Executive Order 38 - Clean Energy in Wisconsin - a transition to a clean energy economy will generate thousands of family supporting jobs, promote clean energy workforce training

- Executive Order 52 - Creation of the Governor's Task Force on Climate Change
  - Recognition that climate change exacerbates existing threats to communities of color and low-income communities
  - Make sure voices are heard at the table – recognize that this is the biggest gap that hasn’t been met
  - Diversifying this work is important, step outside of our comfort zone to get people engaged
State Energy Officials - Energy Equity Task Force

- National Association of State Energy Officials – Energy Equity Task Force
- Advance equitable and inclusive energy and climate policies and programs
- Work with experts and practitioners advancing research and understanding on income, racial, geographic, and other inequities and their impacts
- Develop processes and strategies that effectively engage communities on the front lines of economic and environmental injustice and that result in solutions for more just and inclusive energy systems
QUESTIONS?