#lifechange: Environmental Career Worker Training Programs
What is the Environmental Career Worker Training Program (ECWTP)?

- Funded by NIEHS
- Focus on delivering comprehensive training to disadvantaged and underrepresented minority workers in areas such as environmental restoration, construction, hazardous materials/waste handling, and emergency response
- Emphasis on Life Skills and Job-Readiness Training
- Success through partnerships
- Produces Positive Results
Moderator:
Steve Surtees
Environmental Career Worker Training Program Director
CPWR – The Center for Construction Research and Training

Panelists:
Yodit Semu
Environmental Career Worker Training Project Coordinator
UCLA – Labor Occupational Safety & Health Program

Adewale OgunBadejo
Workforce Development Manager
GRID Alternatives

Mollie Dowling
Executive Director
OAI, Inc.
UCLA – Labor Occupational Safety & Health Program / Western Region Universities Consortium

Yodit Semu
Environmental Career Worker Training Project Coordinator, UCLA-LOSH
Environmental Career Worker Training Program (ECWTP)

- The Western Region Universities Consortium (WRUC):
  - UCLA-LOSH - **ECWTP**
  - UC-BERKLEY
  - ARIZONA STATE UNIVERSITY
  - UNIVERSITY OF WASHINGTON – **ECWTP**
    - *Constructing Hope*, Portland
    - *PACE*, Seattle
    - *RACEJT*, Alaska

- ECWTP started at UCLA-LOSH and University of Washington in 2010
What we do, Who we Serve

• H&S Training
  • Hands-on
  • We rely on professionals who are experts in their fields
  • HAZWOPER (40-hour)
  • 8-hour Refresher
  • OSHA 10
  • OSHA 30
  • American Red Cross CPR/First Aid
  • Lead Awareness
  • Asbestos Awareness
  • Confined Space
  • Heat Illness Prevention
  • HazCom
  • Respiratory Protection
  • Life Skill, Mentorship
  • Math and Comprehensive Reading
Good, Green Job Opportunities

Area of Focus

• Union jobs / Construction Projects
• Clean-Up
• Energy

Los Angeles Opportunities

• Major projects (PLA, Workforce Diversity)
• Aging workforce
• Initiatives: Zero-waste by 2030, innovative WFD programs
## Program Impact

<table>
<thead>
<tr>
<th>Period</th>
<th>Trained</th>
<th>Completed</th>
<th>Placed</th>
<th>placement rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 1, 2015 to July 31, 2016</td>
<td>108</td>
<td>66</td>
<td>64</td>
<td>97%</td>
</tr>
<tr>
<td>August 1, 2016 to July 31, 2017</td>
<td>173</td>
<td>164</td>
<td>116</td>
<td>71%</td>
</tr>
<tr>
<td>August 1, 2017 to July 31, 2018</td>
<td>154</td>
<td>147</td>
<td>107</td>
<td>73%</td>
</tr>
<tr>
<td>August 1, 2018 to July 31, 2019</td>
<td>241</td>
<td>227</td>
<td>195</td>
<td>86%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>676</td>
<td>604</td>
<td>482</td>
<td>80%</td>
</tr>
</tbody>
</table>
Partners and Stakeholders

- LOSH
- LABWC
- WINTER
- DTSC
- CRC
- CEO
- GRID Alternatives
People. Planet. Employment
Solar program for Low-Income Communities
GRID Alternatives

Adewale OgunBadejo
Workforce Development Manager
GRID Alternatives is 501 c3 non-profit and a national leader in making clean energy technology and jobs accessible to low-income communities and communities of color.
Vision:

At GRID, we believe that a successful transition to clean energy must include everyone.

Triple bottom line

- People
- Planet
- Employment
Our Work

1. Policy and program development
2. Solar Installation
3. Workforce Development
GRID Alternatives is a leading voice in renewable energy access, driving policies at the state and local level that support solar access for underserved communities and helping design and implement low-income solar programs.
Workforce Development

Connecting people that need good jobs with an industry that needs good people.
Opening career pathways

GRID’s workforce development programs provide hands-on installation experience that helps prepare participants for careers in solar, connecting people that need good jobs with an industry that needs good people.
GRID Alternatives IBT Certificate Program

- Hands-on focused training program to prepare trainees for solar careers
- Documented training that can be used on resumes
- Job search support and industry connections

What certificates are earned through the GRID Alternatives IBT Certificate Program?

**Array Installation Basics**
- Job Site Safety
- Fall Protection
- Array Layout
- Racking Installation
- Microinverter Installation
- Module Installation

**Electrical Installation Basics**
- Job Site Safety
- Electrical Safety
- Electrical Layout and Mounting
- Conduit Bending and Installation
- Electrical Wiring
Solar Job Market

Diverse workforce

Low barriers to employment

Solar Foundation Annual Jobs Report 2017
### Top 100 Fastest Growing Occupations in California, 2016-2026

<table>
<thead>
<tr>
<th>Occupation Title</th>
<th>Employment 2016</th>
<th>Employment 2026</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar Photovoltaic Installers</td>
<td>4,900</td>
<td>11,300</td>
<td>130.6%</td>
</tr>
<tr>
<td>Home Health Aides</td>
<td>26,600</td>
<td>37,500</td>
<td>41.0%</td>
</tr>
<tr>
<td>Software Developers, Applications</td>
<td>134,200</td>
<td>188,000</td>
<td>40.1%</td>
</tr>
<tr>
<td>Personal Care Aides</td>
<td>622,000</td>
<td>870,000</td>
<td>39.9%</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>13,100</td>
<td>17,700</td>
<td>35.1%</td>
</tr>
<tr>
<td>Statisticians</td>
<td>4,300</td>
<td>5,800</td>
<td>34.9%</td>
</tr>
<tr>
<td>Taxi Drivers and Chauffeurs</td>
<td>28,700</td>
<td>38,700</td>
<td>34.8%</td>
</tr>
<tr>
<td>Physician Assistants</td>
<td>10,200</td>
<td>13,700</td>
<td>34.3%</td>
</tr>
<tr>
<td>Physical Therapist Aides</td>
<td>6,500</td>
<td>8,700</td>
<td>33.8%</td>
</tr>
<tr>
<td>Occupational Therapy Assistants</td>
<td>1,900</td>
<td>2,500</td>
<td>31.6%</td>
</tr>
<tr>
<td>Physical Therapist Assistants</td>
<td>5,200</td>
<td>6,800</td>
<td>30.8%</td>
</tr>
<tr>
<td>Health Specialties Teachers, Postsecondary</td>
<td>15,400</td>
<td>20,000</td>
<td>29.9%</td>
</tr>
<tr>
<td>Operations Research Analysts</td>
<td>14,800</td>
<td>19,200</td>
<td>29.7%</td>
</tr>
<tr>
<td>Medical Assistants</td>
<td>84,800</td>
<td>109,600</td>
<td>29.2%</td>
</tr>
<tr>
<td>Massage Therapists</td>
<td>26,900</td>
<td>34,700</td>
<td>29.0%</td>
</tr>
<tr>
<td>Physical Therapists</td>
<td>21,900</td>
<td>28,200</td>
<td>28.8%</td>
</tr>
<tr>
<td>Phlebotomists</td>
<td>12,900</td>
<td>16,600</td>
<td>28.7%</td>
</tr>
<tr>
<td>Nurse Anesthetists</td>
<td>1,400</td>
<td>1,800</td>
<td>28.6%</td>
</tr>
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</table>
Special Programs & Initiatives

GLA
WFD

Women In Solar

Reentry Initiative
Special Programs & Initiatives, Continued

Opportunity Youth

GLA
WFD

Troops to Solar
Educational Programs

Solar Futures

Collegiate Network & Solar Spring Break
Internship Model!

• In 2018 we secured funding to provide 12 paid internships for formerly incarcerated individuals

• In 2019 we provided paid internships for 52 local community members

• In 2020 we will provide close to 90 paid internships for local community members
Internships

Watts Rising Workforce Development Program
2019-2021
Drake Residence Long Beach, CA

Two day install September 10th & 11th

128 total hours of training and hands-on experience

4.8 kW system

16 Solar Panels providing close to $900 in annual savings over 20+ years
Formal Partners

- Los Angeles Trade Technical College
- Santa Monica College
- Homeboy Industries
- Los Angeles Conservation Corps
- Coalition for Responsible Community Development
- Conservation Corps Long Beach
Does Workforce Development Work?

GRID Trainees getting hired!

- Since 2012 more than 537 individuals that have trained with GRID have found employment in the solar industry.
- From 2015 to present, more than 324 solar industry placements have been recorded.
- In 2018, 76 individuals that trained with GRID found employment in the solar industry.
Spark solar careers
Invest in local communities
OAI, Inc.

Mollie Dowling

Executive Director
Chicago-based OAI is a nationally recognized pioneer in workforce development. Our work opens career pathways; fuels business success; promotes health, safety, and the environment; and supports community development. For more than 40 years, we’ve been delivering real economic benefit to individuals, employers, and communities across the country.
Future Energy Jobs Act (FEJA)

Senate Bill 2814 was one of the most significant pieces of energy legislation ever to pass the Illinois General Assembly. It was passed during the December 2016 Session.
Overview

OAI aims to train 160 low-income students including returning citizens, minorities, current and former foster children, women and veterans living in and around environmental justice communities in solar photovoltaic (PV) systems for solar employment generated by the Future Energy Jobs Act (FEJA) over the 4-year period (2018 – 2021).
Goals (2017 – 2021)

OAI will offer a total of 8 cycles of training to cohorts of 20 students each to reach the goal of training 160 students over a four-year period.

<table>
<thead>
<tr>
<th>Outreach and Recruitment #</th>
<th># Selected to participate in Tryouts</th>
<th>Participants Enrolled in the Program</th>
<th>Graduates Completing Program</th>
<th>Graduates Placed in Solar-related Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1300</td>
<td>780</td>
<td>160</td>
<td>136 (85%)</td>
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</table>
Accomplishments (2017 – 2019)

OAI has offered 6 cycles of training to a total of 128 students over the past two years.

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<tr>
<td>755</td>
<td>290</td>
<td>128</td>
<td>90 (set to be 111) 21 are currently enrolled</td>
<td>74 (82%)</td>
</tr>
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Goals

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Career Guidance & Power Skills Training

• Non-technical courses include: financial empowerment, cultural diversity, conflict resolution, critical thinking, fitness and nutrition, time and stress management, goal setting, and self-esteem.

• Career Guidance includes: resume building, interviewing, building relationships, individual employment plan development, and overcoming ex-offender employment barriers.

• Power Skills courses also include: Environmental Literacy, Computer Literacy, Industry Math, and Industry Spanish.

• A minimum of **88 hours** of training is offered to each trainee.
Career Specific Technical Training


• Basic Carpentry, First Aid/CPR, OSHA 10-hour, OSHA Fall Protection, HAZWOPER 40-hour, and Forklift Operations.

• This component includes classroom and hands-on lab training totaling approximately **232 hours**.
Outputs

• Provide career guidance and placement of all graduates into an initial job.

• Track and conduct follow-up of all participants for minimum of one year beyond the end of each training cohort.

• Conduct training that applies current thinking in adult education principles and methods—blended student-centered learning, participatory and cooperative learning, hands-on exercises and experiential learning.

• Provide curricula that includes two components: Career Guidance/Power Skills Training and Career-Specific Technical Training.

• Prepare students for entry-level employment as a designer, installer, troubleshooter, and maintenance technician for solar-photovoltaic power systems.

• Prepare students to perform successfully on the NABCEP PV Associate Exam.
Cynthia Myers,
Solar Installer, ReThink Electric
Sedrick Torry,
Manufacturing Technician, Ferrera
Questions?
Thank you!

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