



California Public Utilities Commission
California Workforce Development Board

Environmental and Social Justice High Road Workforce En Banc

October 17, 2023

9:00 a.m. – 4:30 p.m.

The California Endowment Regional Office at the Center for Healthy Communities
Sacramento, California



Welcome and Introductions

CPUC Workforce En Banc Planning Team

Commissioner Shiroma's Office

- Cheryl Wynn
- Ritta Merza
- Jack Chang
- Stephen Castello

Office of the Commission

- Kristi Stauffacher
- Kendra Norton

Water Division

- Alison Pafford

Security and Resilience Branch Safety Policy

- Maria Jaya

Consumer Protection and Enforcement

- Janeen Long

Legal Division

- Lisa-Marie Clark
- Jessica Warner

Tribal Advisor

- Kenneth Holbrook

Communications Division

- Benjamin Menzies

External Affairs

- Stephanie Green
- Asia Powell
- Maitee Rossoukhi
- Allison Brown
- Jaime Elder
- Jill Walker
- Julie Hall

Energy Division

- Peter Franzese
- Savannah McLaughlin



Keynotes

California's ESJ High Road Transition Future



Derek Kirk

Assistant Deputy Secretary of Climate
California Labor & Workforce Development



Christina Snider-Ashtari

Tribal Affairs Secretary to Governor Gavin Newsom



Larry Rillera

Air Pollution Specialist
California Energy Commission



Clean Transportation Program Workforce Development and Training

October 17, 2023

Larry Rillera, Air Pollution Specialist
California Energy Commission

Clean Transportation Program

- Established in 2007 by Assembly Bill 118 (2007) and extended to July 1, 2035, by Assembly Bill 126 (2023).
- Provides approximately \$95 million of funding per year.
- Program Investment Plan determines funding allocations across various categories including **workforce development and training**.
- Committed to **inclusion, diversity, equity, and access**.
- Ensuring participation and **direct benefits** to all communities and supporting state/local economic development.
- Provide **more than 50 percent** of Clean Transportation Program funds toward projects that benefit low-income and disadvantaged communities.



(Source: Mujeres Empresarias Tomando Acción)

Manufacturing Portfolio

- Support in-state manufacturing of ZEVs and ZEV-related supply chains.
- 56 commercial ZEV Manufacturers in CA.
- \$278M in CEC awards & \$372M in match since 2009.
- Electric trucks and buses, EV chargers, batteries, traction motors, systems.
- International Brotherhood of Teamsters, Local 853 (GILLIG CORP., Hayward, CA).
- Sheet Metal Air, Rail and Transportation Workers Union, Local 105 (BYD Motors, Lancaster, CA).



(Source: Blue Green Alliance)



Source: GILLIG, battery electric bus

Workforce Portfolio

- ZEV High School Automotive Program
- Transit Apprenticeship Training (Valley Transit Authority)
- Electric School Bus Training Project (Cerritos College)
- Medium- and Heavy-Duty ZEV Automotive Training Program
- Electric Vehicle Infrastructure Training and Certification Project
- Tribal ZEV Training Project (National Indian Justice Center)



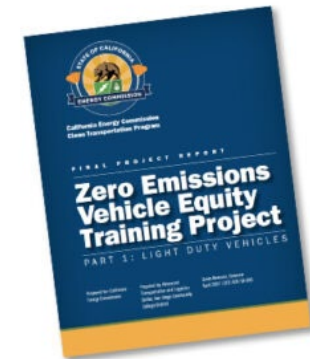
Centering Economic Equity

- Public, Private, Partnerships
 - EV Charging Infrastructure: Equity Workgroup (CaIETC)
 - H-1B Skills ZEV Transit Apprenticeship Training (CWDB/DOL grant)
- IDEAL ZEV Workforce Pilot Projects (CEC/CARB)
- Clean Transportation Program Incentives/Solicitations
- ZEV Infrastructure, Planning, and Workforce Tribal Funding (CEC pending)



AB 2127 Second Assessment Labor and Workforce Workshop

California Energy Commission, Fuels and Transportation Division
Larry Rillera, Air Pollution Specialist
October 18, 2022 | 1:00 p.m.



GFO-23-602 - Charging and Refueling Infrastructure for Transport in CALifornia Provided Along Targeted Highway Segments (CRITICAL PATHS)

All projects must prepare a **Workforce Plan** that includes but is not limited to:

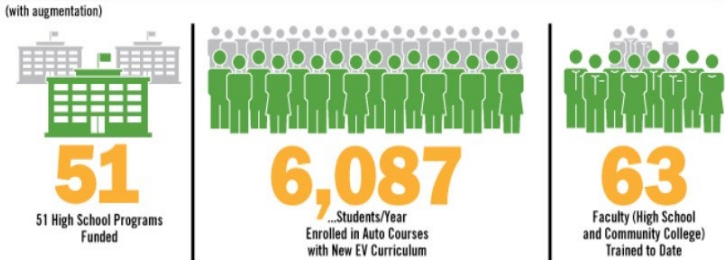
- Outreach and engagement efforts aimed at job recruitment, job-placement strategies, and local hiring especially from those facing **employment barriers** and residents from disadvantaged and/or low-income communities (DAC/LIC) and individuals whose income is below poverty.
- Support **job quality** by providing estimated total number of workers to be trained and/or hired; job classifications or titles; job classifications' specific role(s) in the project; wage rates and benefits; share of jobs that are short-duration positions (less than 12 months) and long-term positions (12 months or more).
- Promote training and **upward mobility** including benefits to workers from DAC/LIC, provide an estimate of the number of training hours during the project, and identify workforce training partnerships with local community-based organizations, workforce development boards, and **high road training partnerships**.
- How job training, placement and employment will lead to careers with **living wages, health care, and other benefits**.
- Experience respecting and implementing labor laws including workers **right to organize**.

(Source: <https://www.energy.ca.gov/solicitations/2023-09/gfo-23-602-charging-and-refueling-infrastructure-transport-california>)

Metrics and Results

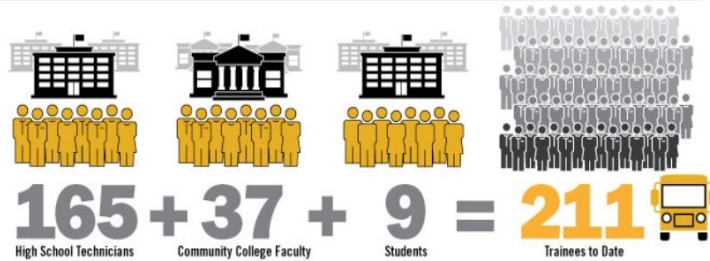
HIGH SCHOOLS
Zero Emissions Vehicle High School Pilot Project

\$3.5 Million Total Funding



The Electric School Bus Training Project

\$1 Million Total Funding



98%

of Funded Schools Meet Disadvantaged Communities Criteria and/or Address Equity Needs

COMMUNITY COLLEGES
Zero Emissions Vehicle Training Enhancement Program

\$3 Million Total Funding



Thank you!

Larry.Rillera@energy.ca.gov



Panel 1

California Public Utilities Commission and California
Workforce Development Board: Partnership in Furtherance
of Workforce Development



Panel 1

Moderator:

CPUC President Alice Reynolds

Panelists:

Curtis Notsinneh, Chief Deputy Director, CWDB

Rachel Peterson, Executive Director, CPUC



Curtis Notsinneh

Chief Deputy Director
California Workforce Development Board

Environmental and Social Justice High Road Workforce En Banc

**Rachel Peterson
Executive Director, CPUC**

**CPUC and CWDB: Partnership in Furtherance of
Workforce Development**

October 17, 2023



Memorandum of Understanding Between Workforce Development Board and CPUC, October 2020

We are seeking to ensure that California “has the workforce and industry-based training partnerships necessary to meet its clean energy and clean transportation goals, while building pathways into the middle class and beyond for Californians who have been historically excluded from opportunity or shouldered a disproportionate share of climate and environmental costs.”



Solar on Multifamily Affordable Housing



SOMAH Job Trainee Requirements by project size:

1. 0kW - <50kW
1 trainee for at least 40 hours of work
2. 50kW - <100kW –
2 trainees and at least 40 hours of work per trainee
3. 100kw + -
2 trainees and at least 80 hours of work per trainee

Energy Efficiency

CPUC-approved utility energy efficiency portfolios included workforce programs:

1. Rural Regional Energy Network's Climate Careers and Clean Energy Academy
2. SCE's Contractor Demand Building Program and New Program Design Pilots Program
3. \$18 million to support workforce, education, and training programs



T-Mobile Merger with Sprint



One of merger conditions supports workforce development in California by requiring that T-Mobile:

1. Have a net increase in jobs in California;
2. Hire 1000+ new employees at the Kingsburg customer experience center in Fresno County in consultation with workforce organizations like West Hills Community College, and
3. Increase diversity of its California workforce, including mentoring, recruiting, development, and training programs.

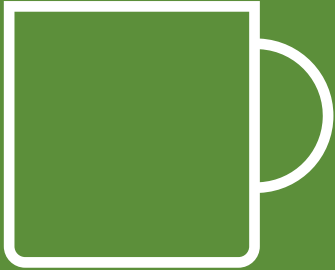
Safety and Enforcement

1. Pre-Inspector Training and Certificate Program
2. Tree Crew Training and Certificate Program
3. Resilience Centers Grant Program





Commissioner Q&A

BRE  K





Panel 2

Workforce Development: A Close-Up of Lived Experiences



Panel 2

Moderator:

CWDB Chief Deputy Director Curtis Notsinneh

Panelists:

Ana Luz Gonzalez-Vasquez, Project Manager, UCLA Labor Center

Dan Kallai, Training Coordinator, California/Nevada Joint Apprenticeship Training Committee

Richard Ramirez, Lead Instructor, California/Nevada Joint Apprenticeship Training Committee

Travis Hinkle, Supervisor, Distribution System, San Jose Water

Kenny Williams, Senior Campaign Lead, Communications Workers of America District 9

Jeremy Smith, Deputy Legislative Director, State Building and Construction Trades Council



Ana Luz Gonzalez-Vasquez

Project Manager
UCLA Labor Center

UCLA Labor Center's POWER in Workforce Development

Lift us up so that we're visible, so that respect is given to us, so that we can then walk in confidence and get those life skills and professional abilities.



I don't know how to speak much Spanish...because I speak pure Mixtec...Sometimes our colleagues look at us differently because we don't speak well...sometimes they make fun of us.



Learning and the growth and everything that comes with it. And it's not just growth in your trade. I've actually looked back and seen myself develop from a young man to an adult man.

"I loved working with people that look like me and people that act like me."



I could be my authentic self. I didn't have to put on any [social] masks to go into work."

There needs to be laws that protect people who are injured, fall at work, or have an accident. There are times, unfortunately, when if someone didn't see it happen, then nothing happened.



The biggest hurdle is knowing that you're not going to have to worry about getting fired because something comes up or somebody says, 'Did you know she was locked up?'



Defend your worker. Because for [employers], a mop and broom is more important than their flesh and blood worker. As long as I am not important to them, they are not going to defend me.



Cal-Nev JATC Line Clearance Tree Trimmer Certification Program

Dan Kallai and Rich Ramirez

California-Nevada Joint Apprenticeship Training
Committee



Line Clearance Tree Trimming-Vegetation Management

- When trees or tree parts contact power lines, there is a high likelihood of fire ignition and typically a loss of energy to the ground.
- Line Clearance Tree Trimmers are directly mitigating the effects of climate change and reducing the number of wildfires and associated carbon emission. Furthermore, they keep the power grid running safely and efficiently by preventing power outages and the costly loss of our electrical resource to ground faults.
- Tree Trimmers and Pruners is a subcategory of Logging with a BLS estimated rate of fatality of 110/100,000 according to Dr John Ball and published in Tree Care Industry Magazine. This rate is nearly 30 times higher than the all-industry average.

SB 247. Dodd, 2019

- Brought vegetation management under the scope of wildfire mitigation here in California.
- Establishes a written standard of who and what qualifies as a trained and qualified Line Clearance Tree Trimmer.
- Effective as of Jan 2020, raised wages to reflect prevailing wage commensurate with electrical utility linemen apprentices, effectively giving “skilled labor” status to Line Clearance Tree Trimmers.
- Approx. 10% increase in wages over night with no stipulations.
- “All qualified Line Clearance Tree Trimmers shall be paid no less than the prevailing wage rate for a first period apprentice electrical utility lineman”.

Cal-Nev Joint Apprenticeship Training Committee

- Was established in 1961 for the training and certification of “linemen” in the State of California.
- A non-profit training trust consisting of IBEW local union representing labor and Contractors representing management that are signatory to IBEW CBA.
- Recognizing the need for evaluation and training of workers, the JATC and industry partners undertook the effort to train and certify these workers to a standardized curriculum in California.
- The JATC formed a Line Clearance Tree Trimming subcommittee to oversee a new area of training and hired staff to evaluate and train industry workers.
- Collective Bargaining renders the JATC’s Line Clearance Tree Trimmer program a VOLUNTARY certification in it’s first evolution.

High Road Training Partnership Success Story

- HRTP funding was critical to the inception of our new LCTT program. Statewide training and certification had been a need for many years, and the grant award supported the JATC's efforts to hire personnel to support the training and certification process.
- The Line Clearance Tree Trimmer certification program has many of the target goals and values of the HRTP vision baked into its very own mission. Environmental protection, socio-economic change and elevation of an entire swath of California's critical infrastructure workers, etc.
- Since January of 2022, over 2300 participants have been voluntarily enrolled into the program, and subsequently into CalJobs for tracking and progress.
- As a result, over 500 participants have been certified with the industry credential.

Reports of Success from the Field

- Note: A strong partnership and Committee existed before the certification program and the use of HRTP funding. Furthermore, The JATC is funded by contributions made on behalf of worker/participants as per a collective bargaining agreement. Making this training available at no cost to the participant.

But, where and how have we managed to generate further success?

In no particular order of importance:

- The instructors are recruited from the ranks of the workforce and management in their local area. Well connected, respected, trusted voices with a finger on the pulse of local operations and workforce culture.

Reports of Success from the Field, cont.

- Instructors cover an area usually 2 to 3 counties and create good relationships and familiarity with the students in that area to conduct site visits and field work evaluations.
- Participants are not tied to a single learning location for educational classes. The program uses an online platform (CANVAS) which allows our working participants to study on their own time at their own pace. The recently opened Woodland campus offers opportunities for practical hands-on learning.
- Instructors are authorized to create opportunities for proctored final exams in convenient locations and hours that work for the participants in their area.
- It is well within our scope and mission to offer intensive, in-person counseling to overcome roadblocks due to mis-communication, electronic services, or other challenges encountered by the participants.

Reports of Success from the Field, cont.

- The program identified and addressed language and cultural barriers for the flow of information. 65% of participants are Spanish-speaking. All material is presented in Spanish and English.
- 13 out of 15 of the field training staff is bi-lingual. Critical to reaching the appropriate working population.
- A website for more information and links to contact individual field instructors
- A YouTube Channel containing tutorials produced in-house which help participants study and pass field assessments and final exams. Audio/Visual learners.
- Created and leveraged an additional. H RTP grant to fund re-imbursement for Commercial Driver Licenses. This generates additional opportunities for workers with aspirations to grow their career.

A decorative graphic at the top of the slide features a series of stylized green hands of varying sizes, some with fingers spread, set against a white background. Below the hands is a thick, wavy green horizontal band.

The Line Clearance Tree Trimmer program is very similar to a start-up and many adjustments have been made along the way. After two short years, there are plans to continue to partner with CWDB and the High Roads Training Partnership.

We appreciate the opportunity to share this presentation with you.

Thank you.





From General Construction to Underground Construction

Travis Hinkle, Supervisor, Distribution System

San Jose Water

Background

- 10+ years as a General Contractor in the South Bay / San Jose area
- This taught me skills I would later use in my water career
 - Learned skills from manual labor to customer service
 - Learned multiple trades to fully understand the big picture
 - Managed projects and people

The Spark for Change

- Realized the physical toll that construction was taking on my body
- Wanted a family and to be able to play with a future kid
- Running a small business and the effort and responsibility it takes to do so was taking a mental toll

A Friend's Role

- Reached out to a long-time friend who started in wastewater collections and was following his own high road into wastewater treatment
- He invited me to tour his plant where I was able to see the multitude of job opportunities that a treatment plant could offer
- He pointed me to Sac State OWP where I followed their training courses and passed my first Wastewater II CA state exam

The Search or The Applications

- I thought that completing the state exam would give me a head start on obtaining a job as a wastewater operator.
- License-Job Paradox: A wastewater license was required for these jobs. Passing the exam is not enough for a license. On-the-job experience is also needed. I found that I couldn't get the OTJ experience without the license but couldn't get the license without the job.
- I found the best way to get my foot in the door was through an OIT program/position which typically consisted of hundreds to thousands of applicants.

Switching Gears

- Through the EDD and Workforce Institute, I enrolled in a water distribution and treatment program which, ironically, was taught by the ex-head of my current department.
- I quickly found that water distribution and treatment go hand in hand with wastewater.
- This program helped me acquire Distribution II and Treatment II state licenses (experience is not needed for these licenses)
- Was able to get my foot in the door at a small water company nearby
- Applied at SJW and was hired as a distribution system operator

Union to Admin

- After 7 years as a water distribution operator:
 - I wanted to keep progressing with Distribution and Treatment licenses. To obtain a T III license, experience working at a treatment plant is required. Since I couldn't get this in my current role, I volunteered at a local small water mutual to obtain the necessary hours to acquire the license.
- Another spark for change: I wanted to learn the other side of water distribution and joined the SJW Distribution Maintenance team where I get to put all my years of exp. in const., and water distribution operation to use on a daily basis.
- I now train and mentor new and existing employees on how they too can find the role that best suits their talents and drive.



Workforce Development

Kenny Williams, Senior Campaign Lead
CWA District 9 – Apprenticeship Program

Kenny Williams
Senior Campaign Lead (Apprenticeship Program)
CWA District 9

- Worked for AT&T from 1975 to 2015.
- Member of Communications Workers of America 1975 to Present.
- Worked as a Steward, Area Steward, Chief Steward, Organizer, Bargaining Chair (Public and Private Sector).
- Local Vice President – 1 Term
- Local Executive Vice President – 2 Terms
- President – 3 Terms
- County Level: Vice President of the Orange County Labor Federation 2012 to 2020. President of the Orange County Labor Federation 2020 to present.
- Regional: Trustee of the CWA D9 Training and Apprenticeship Trust - Current
- National Level: Elected to the District 9 Trial Panel Representative 2014 to 2021.



Experiences with high road
training programs
and
the many benefits.



High Road Training Programs -

They not only provide benefits to the participant
But also to their families, communities and in many
cases there are generational benefits.

High Road Training Programs -

Don't just create jobs, they create careers.

In the case of Broadband and Fiber Optics, these careers won't be replaced by technology in the future because they are the future!

Maintenance.

High Road Training Programs Provide -

- Training with college credits and no debt.
- Earn while you learn.
- Nationally recognized certifications. In the Broadband space we award certifications from the Fiber Optic Association of America.
- Safety OSHA 10 with certificate and OSHA 30 with certificate and college credit.
- Established forum for displaced workers, individuals entering the workforce for the first time, employers and communities come together to build and maintain a path to the middle class.

CWAD9JRS.ORG



High Road Training Programs -

Are where Aptitude meets Access and the road to enhancing all communities begins.



Jeremy Smith

Deputy Legislative Director
State Building and Construction Trades Council



Commissioner Q&A

LUNCH





Panel 3

Partnerships: The Key to Workforce Development



Panel 3

Moderator:

Rafael Aguilera, Field Specialist, High Road Training Partnerships, CWDB

Panelists:

Dr. Carol Zabin, Senior Advisor for the Green Economy, UC Berkeley Labor Center

Jose Bodipo-Memba, Chief Diversity Officer, Sacramento Municipal Utility District (SMUD)

Bernie Kotlier, Executive Director, Labor Management Cooperation Committee (LMCC),
National Co-Chair, Electric Vehicle Infrastructure Training Program (EVITP)

Julia Hatton, President and CEO, Rising Sun Center for Opportunity

Leonard Gonzalez, Executive Director, Laborers' Training & Retraining Trust Fund of Northern
California

Dr. Nosakhere Thomas, Executive Director, Inland Empire Black Worker Center



Carol Zabin

Senior Advisor for the Green Economy
UC Berkeley Labor Center

SMUD's Clean Energy Regional Workforce Strategy

Leading & Co-creating a Diverse & Inclusive Regional Workforce Development Ecosystem



Powering forward.
Together.



SMUD's Vision



VISION

A powerful partner for an inclusive, zero carbon economy

Safety – Always our top priority



Safety & Reliability

World class safety & reliability



Environmental Leadership

Zero carbon by 2030



Community Vitality

Strengthen all communities equitably



Affordability

Cap rate increases at or below inflation



Organizational Agility

Build an inclusive high trust culture & accelerate innovation

People – The foundation of everything we do

SMUD's Regional Workforce Strategy

Addressing the growing need for skilled labor to meet SMUD and the region's zero carbon and electrification goals by:

- Attracting, developing, and retaining key roles at SMUD to deliver on our 2030 Clean Energy Vision; and
- Co-creating diverse and equitable regional pathways to living wage zero carbon jobs through regional workforce outreach, education, and training.
- Align regional strategies to address the work gap
- **Address barriers to entry directly and intentionally**
- Track success by leveraging data and technology



Regional Workforce Careers Strategy Goals



Training and Work Force Development

Recruit and train diverse people with the skills needed to perform utility jobs available now in the future



Living Wage Jobs

Creation of new direct and indirect job access in growing energy sectors with direct pathways to a wider pool of regional talent



Community Partnership

Leverage partnerships with community organizations to develop job-ready employees to ensure inclusive workforce development access

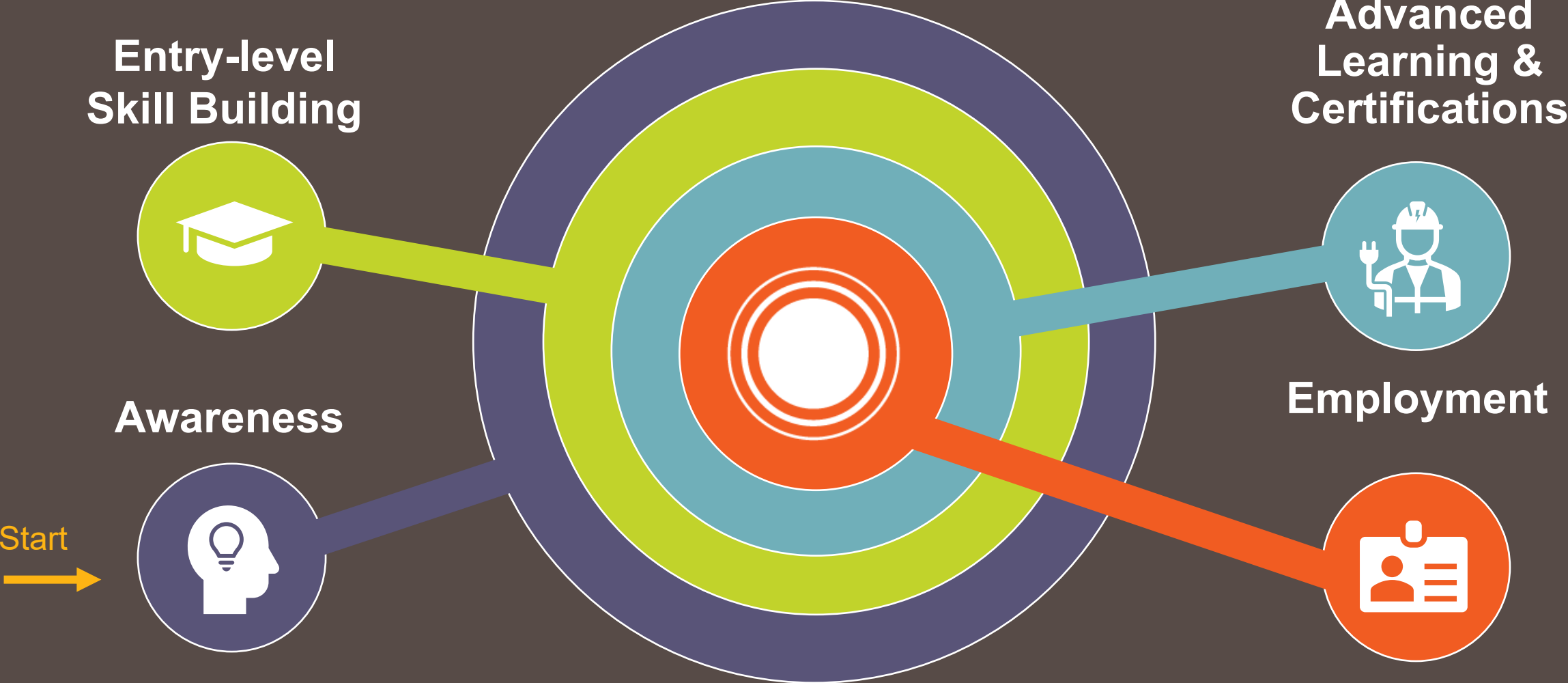


SMUD & Regional Skills Needs Alignment

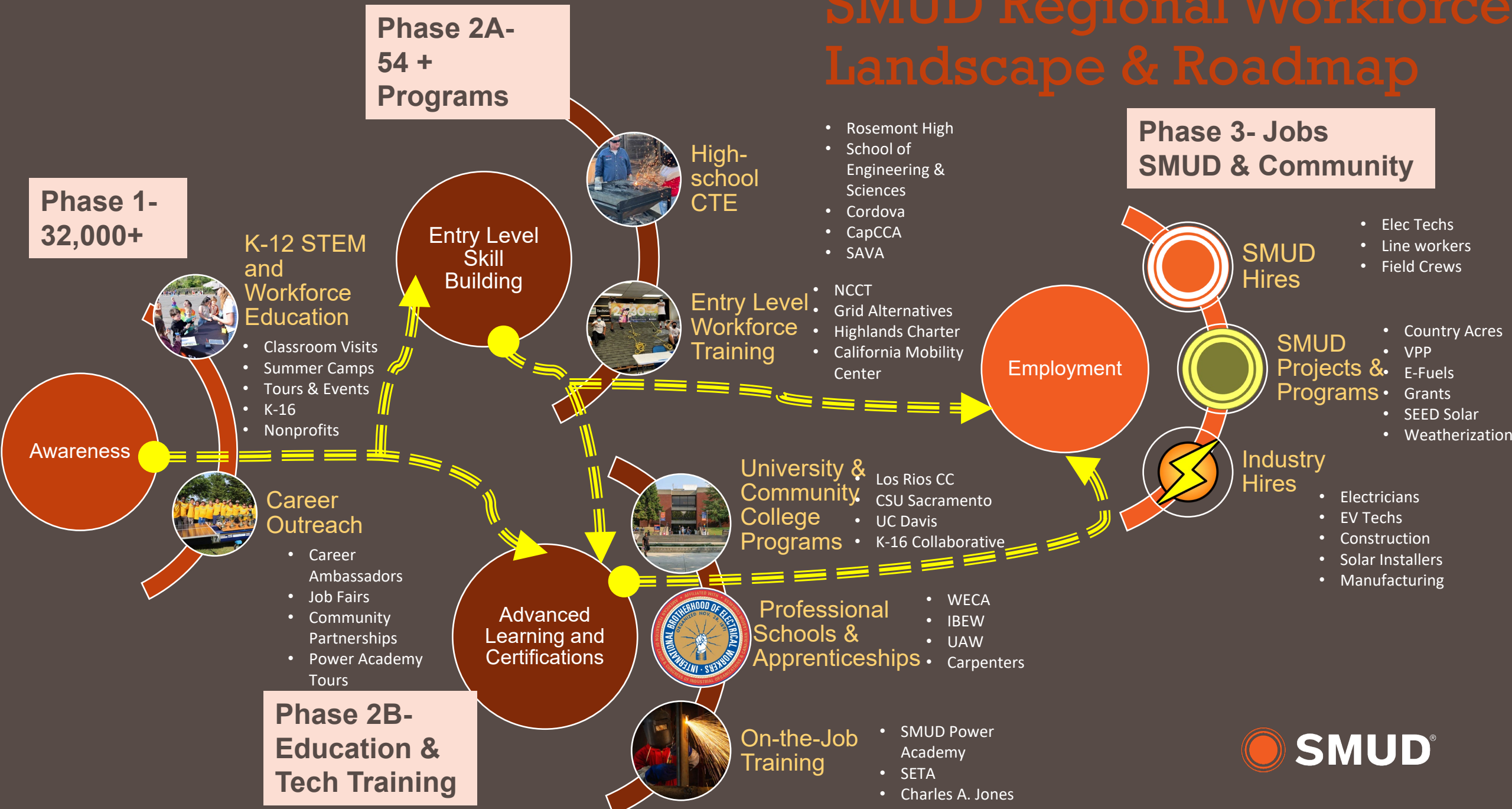
Establishing core competencies and curriculum that will meet the near term and long term needs for SMUD and regional economy
Collaborate with regional employers and organizations to create shared vision

Success Metric:
3,000 new training program graduates and 1,000 regional job or internship placements by December 2024.

SMUD's Regional Workforce Strategy: 4 Steps



SMUD Regional Workforce Landscape & Roadmap



**Phase 1-
32,000+**

Awareness

K-12 STEM and Workforce Education

- Classroom Visits
- Summer Camps
- Tours & Events
- K-16
- Nonprofits

Career Outreach

- Career Ambassadors
- Job Fairs
- Community Partnerships
- Power Academy Tours

**Phase 2A-
54 +
Programs**

Entry Level Skill Building

High-school CTE

- Rosemont High
- School of Engineering & Sciences
- Cordova
- CapCCA
- SAVA

Entry Level Workforce Training

- NCCT
- Grid Alternatives
- Highlands Charter
- California Mobility Center

University & Community College Programs

- Los Rios CC
- CSU Sacramento
- UC Davis
- K-16 Collaborative

Advanced Learning and Certifications

Professional Schools & Apprenticeships

- WECA
- IBEW
- UAW
- Carpenters

On-the-Job Training

- SMUD Power Academy
- SETA
- Charles A. Jones

**Phase 3- Jobs
SMUD & Community**

SMUD Hires

- Elec Techs
- Line workers
- Field Crews

SMUD Projects & Programs

- Country Acres
- VPP
- E-Fuels
- Grants
- SEED Solar
- Weatherization

Industry Hires

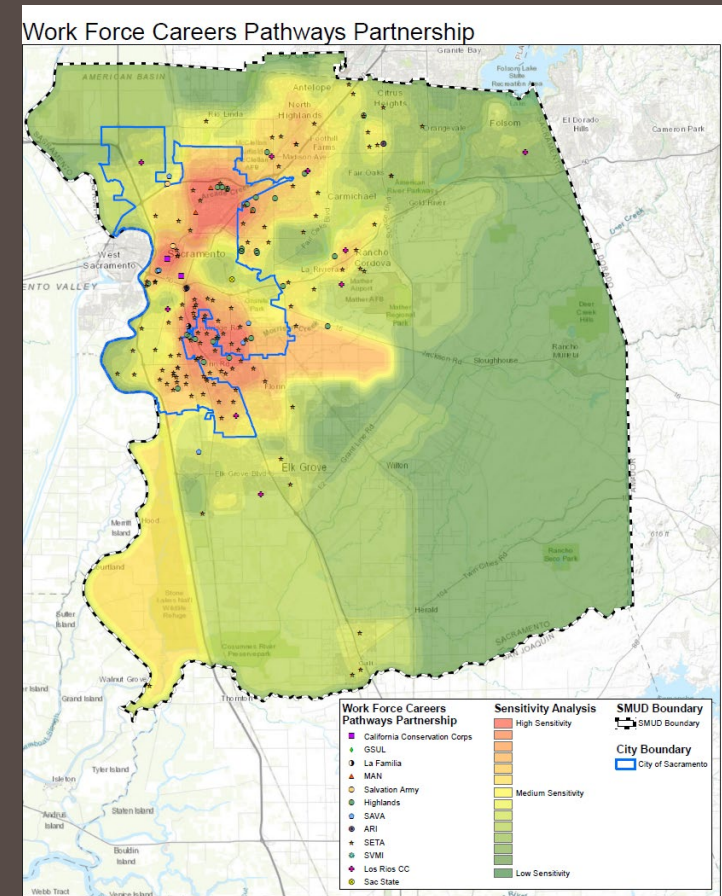
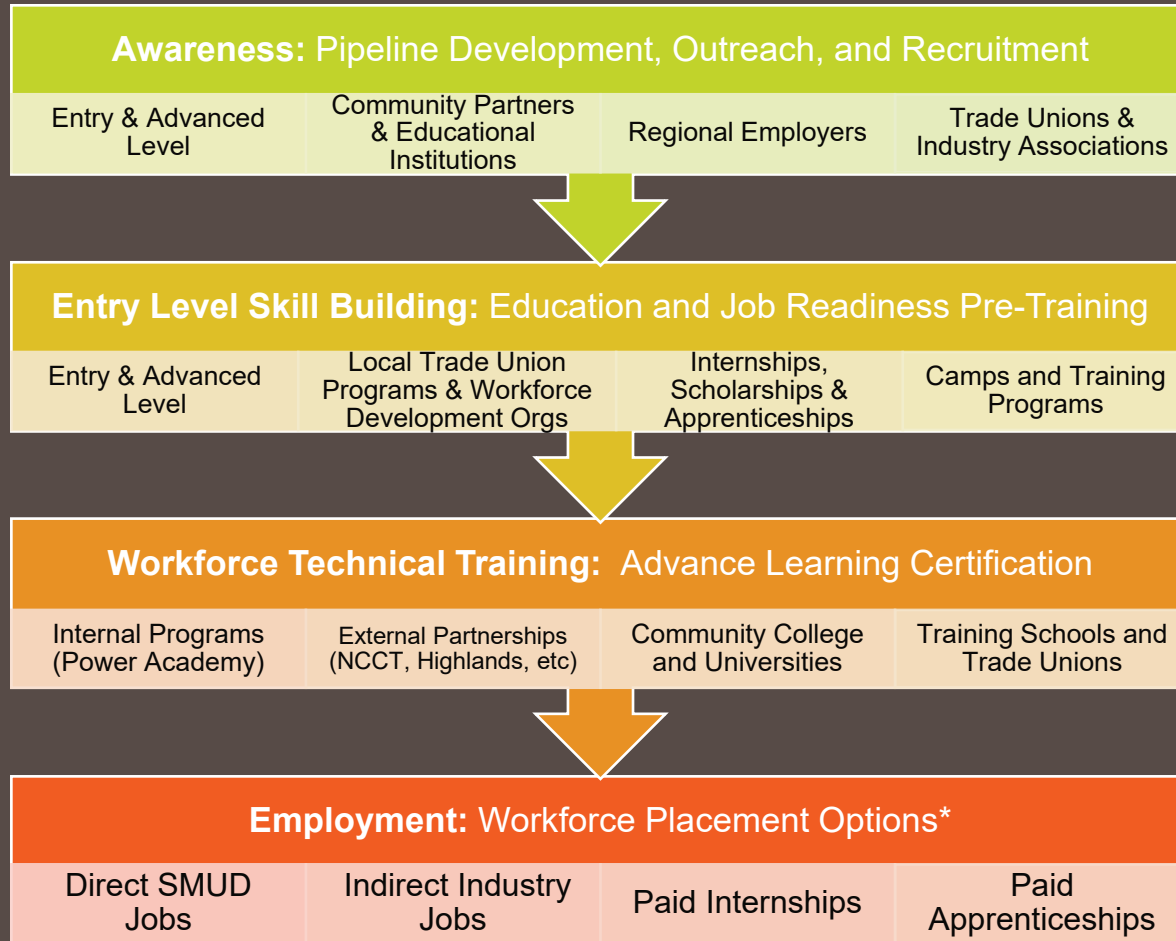
- Electricians
- EV Techs
- Construction
- Solar Installers
- Manufacturing





Career Pathways – Mapping Opportunity

Creating Equitable Access and Engagement Through Regional Partnerships





Regional Workforce and Economic Development

Align Workforce Training Curriculum with Job Opportunities



Solar Training + Electrification

- Partnership with Grid Alternatives
- Entry Level solar training plus electrification (storage, EVSE, electric appliances)
- 4 weeks, 40 hrs/week, wrap around services, stipends, ~ 5 cohorts/yr.



Electrician Trainee

- Collaboration with Northern California Construction Training, Inc. and SMUD's Power Academy
- Collaboration with Community Resource Project and California Conservation Corps Energy Corps



Construction & Electrification

- New construction electrification classes and schools to increase talent pipeline for entry level construction jobs
- Partnership with Green Tech Mobility Hub Construction in Del Paso Heights



Battery Storage, Mobility, Manufacturing & Supply Chain

- Align regional clean energy projects with equitable workforce training/job placement
- Establishing a Center of Excellence to support training up a local advanced energy storage industry workforce.

In 2022:



54
Training
Programs



Over 3k
reached



Over 400
hired



Tracking and Measuring Success

Leverage data and partnerships
Quickly identify, attract, train, and retain needed talent



Number of Individuals Trained: stimulating talent capacity in our region, by neighborhood, by skill focus area, and community.



Direct and Indirect Jobs Hired: Measuring Direct (SMUD jobs) and indirect jobs (regional jobs) coming from the SMUD regional workforce pipeline through data tracking.



Inclusive Economic Development: Measuring regional economic Development impact from programs, grants, jobs, and new business generation.



Community Recruitment & Outreach: Tracking growth and recruitment efforts in alignment with our DEIB Strategy Goals

Our audience

Residential

- Low- & median-income populations who can't afford necessities
- Renter with higher energy burdens
- Under-served populations with cultural or language barriers

Commercial

- Small businesses
- Nonprofits

Our focus

- Affordability**
- Equitable access**
- Community engagement**

We're doubling the current investment towards under-resourced communities!

Our approach

- **Diversifying** clean energy programs to make them accessible to more residential customers.
- **Leading** inclusive economic development with new job trainings and job placement programs for clean energy jobs.
- **Focusing** on investing in the business community through meaningful and impactful partnerships.
- **Creating** capacity building opportunities for nonprofits to support our 2030 zero carbon plan engagement.
- **Showing up** in culturally relevant ways with community education and outreach through our community ambassador teams.

Opportunities

Partnerships

Next Steps



Bernie Kotlier

Executive Director, Labor Management Cooperation
Committee

National Co-Chair, Electric Vehicle Infrastructure Training
Program



Julia Hatton

President and CEO
Rising Sun Center for Opportunity



Leonard Gonzalez

Executive Director

Laborers' Training & Retraining Trust Fund of Northern
California



Dr. Nosakhere Thomas

Executive Director
Inland Empire Black Worker Center



Commissioner Q&A



Panel 4

Workforce Development in Tribal Communities



Panel 4

Moderator:

Anecita Agustinez, Tribal Policy Advisor, California Department of Water Resources

Panelists:

Lorenda T. Sanchez, Executive Director, California Indian Manpower Consortium, Inc.

Cynthia "Cindy" Corrales, Workforce and Volunteer Manager, GRID Alternatives Inland Empire

Angelica Wright, Tribal Education and Workforce Manager, GRID Alternatives Tribal Program

Zoe Watson, Rural Community Development Program Manager, Sierra Institute for Community and Environment



Lorenda T. Sanchez

Executive Director

California Indian Manpower Consortium, Inc.

California Indian Manpower Consortium



45 Years

of service to Indian Country



CIMC Service Area



30 Workforce

Development Employees



\$3,988,513

166 funding for Services



\$14,137,480

In partnership funding



info@cimcinc.com (800)

640-2462

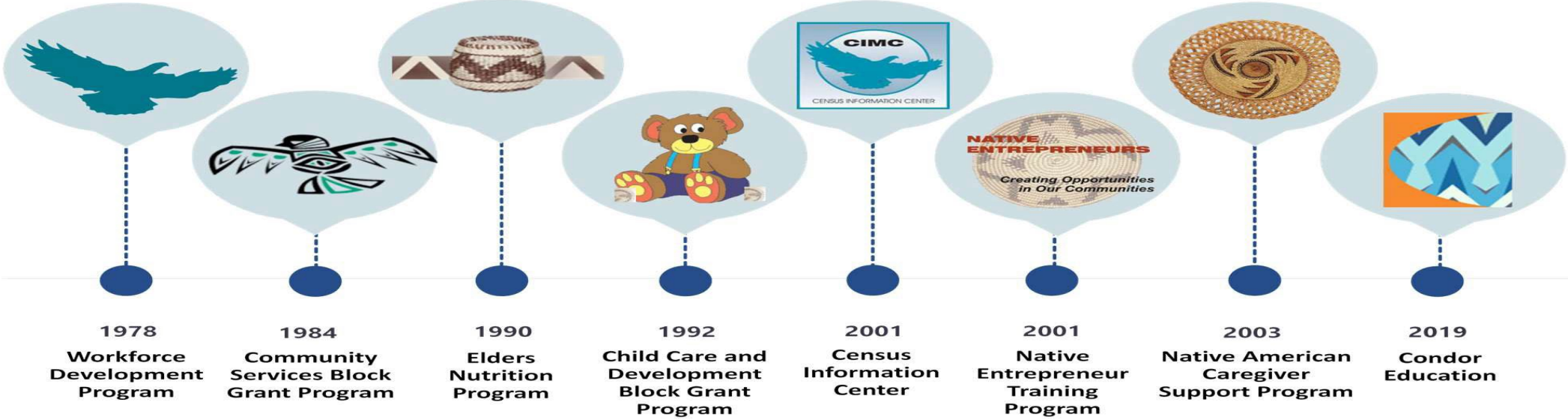
*Creating Positive Change
For Native Communities*

10/13/2023

CIMC Workforce Development Program Service Area



CIMC Programs



CIMC's Current Projects

Better Careers Fund Project

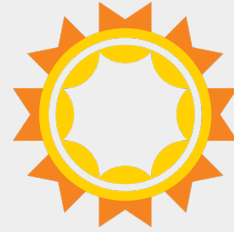
COVID Education Recovery Project

Elevate Youth California Project

Informing Native Communities Project

Sustaining Native American Economies Project

Tribal Labor Force Study Project



**TRIBAL SOLAR
ACCELERATOR FUND**
GRID Alternatives



GRID Alternatives' Tribal Workforce Initiatives

Angelica Wright, Tribal Education and Workforce Manager
Cindy Corrales, Workforce & Volunteer Manager

About GRID

- **Mission**

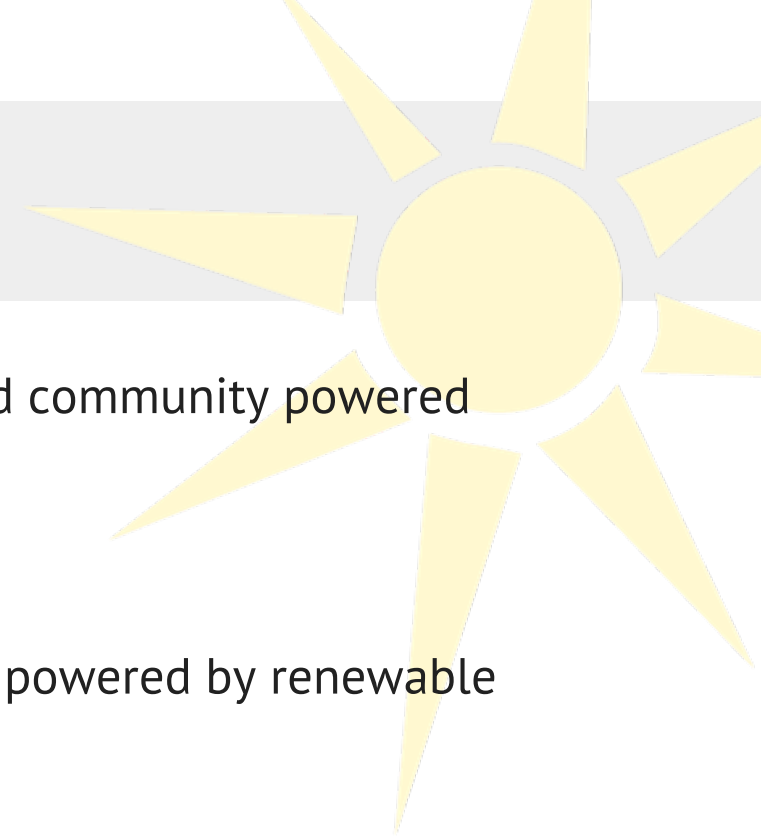
- GRID Alternatives is a 501(c)3 national non-profit with mission to build community powered solutions to advance environmental justice through renewable energy.

- **Vision**

- Through our work, we envision a rapid, equitable transition to a world powered by renewable energy that benefits everyone

- **Work**

- Equitable access to clean energy can address climate change and economic inequality at the same time by:
 - reducing the expense of energy
 - eliminating energy poverty for tribal nations and communities who lack access
 - **Creating workforce development opportunities for those who want to enter the clean energy labor force**



GRID's Tribal Work



GRID
ALTERNATIVES



01

GRID's National
Tribal Program

Tribal Solar
Accelerator Fund

02

03

California
Regional Offices



TRIBAL SOLAR
ACCELERATOR FUND

GRID Alternatives

TRIBAL
PROGRAM
GRID ALTERNATIVES

GRID'S National Tribal Program

GRID established the National Tribal Program in 2010 to partner with indigenous communities to reach their renewable energy goals. The National Tribal Program focuses primarily on Solar PV Installation and workforce development to promote energy sovereignty and energy justice.

7.7 Megawatts of Solar Installed 

50
Partner Tribes

1,700
Tribal Families Served


\$44
million
Client Lifetime Savings


1,660
Workforce Development Participants


950
Total Solar Projects

Projects Completed in **8 States**



MT
CA
SD
AK
UT
WA
NM
CO

Program Staff

11 staff members experienced in project & construction management, solar installation, training and educated in environmental policy and federal and tribal governments.



Julius Billie & Yulissia Raphealito, Dine

Thelma Wall, Blackfeet



Tribal Solar Accelerator Fund

Provides grant funding for new solar projects for tribes; tribal facility and residential projects, energy planning, large scale projects.

Support individuals through; experiential learning, scholarship and internship opportunities, and professional development.

Grants up to 200k

- Residential and Facility Grant
- Gap Funding Grant
- Energy Planning Grant

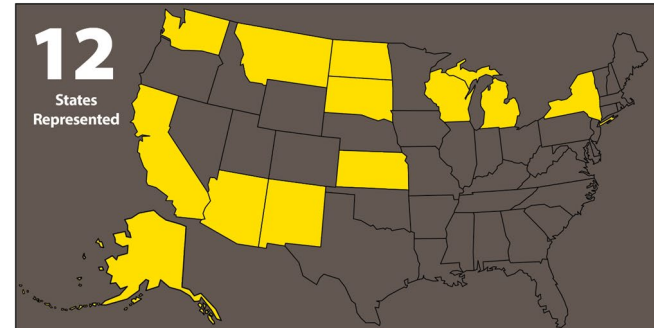
TRIBAL SOLAR PROJECT IMPACTS (TO DATE)

\$7.3 million

TOTAL FUNDING AWARDED

2.58

MEGAWATTS OF SOLAR FOR TRIBAL NATIONS



\$14.2 million
LIFETIME ENERGY SAVINGS

329
TOTAL SOLAR INSTALLATIONS

200+
TRIBAL MEMBERS TRAINED

65
TOTAL GRANTEES

LEADERSHIP PROGRAM IMPACTS

TRIBAL EDUCATIONAL SUPPORT

\$130,000 TOTAL FUNDING AWARDED
18 TRIBAL STUDENTS SERVED
7 EXPERIENTIAL LEARNING
6 TRIBES REPRESENTED

TRIBAL ENERGY INNOVATORS FELLOWSHIP

\$190,000 TOTAL FUNDING AWARDED
13 TRIBAL MEMBERS SERVED
9 STATES REPRESENTED
8 TRIBES REPRESENTED



GRID ALTERNATIVES' TRIBAL WORKFORCE INITIATIVES



BUILD HUMAN CAPACITY IN TRIBAL RENEWABLE ENERGY

- Expand Funding Opportunities for Tribal Renewable Energy System Projects.
- Provide a Pathway to Human Capital Funding through the Tribal Solar Accelerator Fund.
- Increase funding for the education, training, and leadership development of tribal members.



CREATE ACCESS TO TRIBAL RENEWABLE ENERGY EDUCATION AND TRAINING

- Disburse funding for tribal members education through scholarships and internship opportunities.
- Create experiential learning opportunities to introduce tribal members to the field of renewable energy.
- Develop education hubs and access for tribal members to learn and be able to assist with their tribe's renewable energy project development.



DEVELOP COMPREHENSIVE INSTALLATION TRAINING PROGRAMS FOR TRIBAL MEMBERS

- Prepare tribal members and communities to install and maintain solar PV systems.
- Implement GRID IBT 120 and 200 training curriculum.
- Incorporate training opportunities into each of our tribal installs.
- Create adaptable and culturally engaging training opportunities.



DEPLOY MORE TRIBAL-LED SOLAR INSTALLATION TEAMS

- Increase the number of Tribal-led solar installation teams.
- Facilitate the creation of skilled installation teams within Tribal communities, leading to job creation and economic development.
- Provide employment opportunities throughout GRID and partner organizations.



ENGAGE IN TRIBAL RENEWABLE ENERGY COMMUNITY COALITION BUILDING

- Partner with tribes to assist in the development and funding of their Solar PV Systems.
- Invest in leadership and mentoring opportunities to engage and celebrate tribal renewable energy leaders.
- Collaborate and partner with Native organizations and Tribes, and TCU's.

CREATING TRIBAL ENERGY LEADERS

LEADERSHIP

PROGRAMS

Community and Fellowship

TSAF strives to promote a strong and interconnected community of Tribal Energy leaders. Our fellowship allows for tribal members leading energy initiatives access to financial support and a network of mentors and industry leaders.

Education and Experiential Learning

TSAF provides accessible education support through scholarship funding, internships, and an innovative online 8 week training program through our Summer Associates Program.



CA Regional - Tribal Workforce

- Solar Futures – Youth, Career exploration
- Paid Training – Project based, Internships, Fellowships
- Priority – Tribal members on Tribal infrastructure projects
- Engage Tribal Colleges



Thank you!





High Road to Tribal Forest Restoration and Stewardship

Zoe Watson

Sierra Institute for Community and Environment

Program Manager

- Workforce program focused on the Sierra and Southern Cascades
 - Expanding statewide through the Inter Tribal Stewardship Workforce Initiative
- Builds on longstanding efforts to advance rural and tribal development AND ecological restoration through stewardship crews and wood utilization campus development
 - North State California Jobs First (formerly CERF) Convener

H RTP Trainings range from basic to advanced skills training



Hand thin piles from fuels reduction project: Susanville Indian Rancheria.



Pit River Tribal Member completing Heavy Equipment Operations Training at Shasta College



Saw Training at Berry Creek Rancheria in a post fire landscape

Examples of Trainings offered	
Wilderness First Aid and CPR	Firefighter Type 2
Wilderness First Responder	Fuels Reduction
S212 Basic Chainsaw Operation and Maintenance	Grasslands and Seasonal Rounds Workshop
Intermediate/Advanced Saw Training	Heat Illness Prevention
Hazard Tree Removal	Invasive Species and Stewardship Workshop
Ropes, Rigging, and Mechanical Advantage	Natural Resource Management Training
Basic 32 Firefighting	Pack Test
Introduction to the Incident Command System FEMA 100	Prescribed Burning
Introduction to the National Incident Management System FEMA 700	Cultural Burning
Field Crew Leadership Training	Safety program development
Hazwoper 40	TREX Incident Management
Heavy Equipment Logging Operation and Maintenance	Chipper Training
Traditional Ecological Knowledge (TEK)	Cone Collection

The Process: Meeting Tribe Specific Workforce and Restoration Goals



- Meet with Tribal Councils
- Build Relationships
- Assess workforce goals, tribal capacity and land stewardship goals
- Develop a training plan
 - Center around OJT
- Coordinate with Tribal leadership to secure future work

Capstone Training Program: Tribal Crew Leadership Training



- Inter Tribal Collaboration
- Tribal Capacity Development
- Leadership Development
- Scenario review
- Participatory process with curriculum topics developed with Tribal partners
- Experts from a range of specialties come to training in an interactive learning environment.

As many as 14 different Tribes have joined a single session

Some Lessons Learned

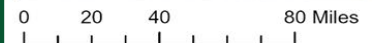
- Link paid training to employment so there are no gaps in engagement
- Bring training to Tribal and rural communities, with training often on tribal lands
- Support Tribes in developing long-term training and employment plans that support both communities and the landscape



Inter Tribal TREX Training



Legend
 ★ Tribal Locations

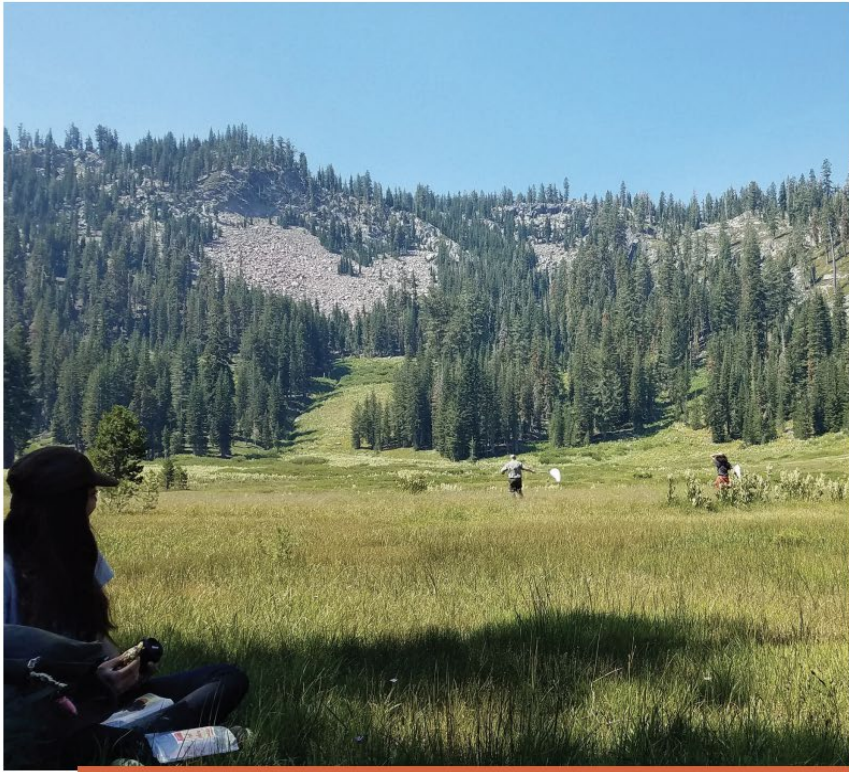


High Road to Tribal Forest Restoration and Stewardship



Outcomes

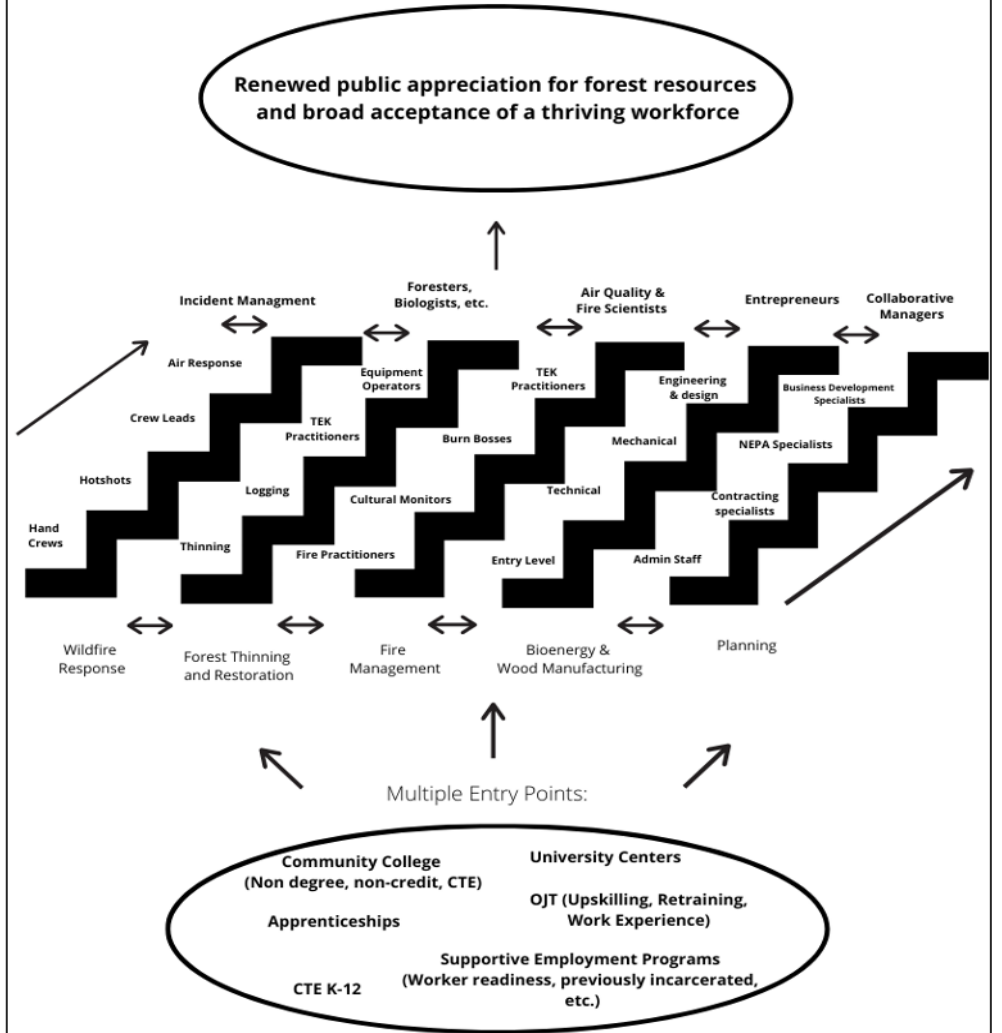
Since 2021, the partnership has provided trainings and workforce development for 306 individuals from over 18 unique Tribes.



WORKFORCE DEVELOPMENT STRATEGIC PLAN

BUILDING A WILDFIRE AND FOREST RESILIENCE ECONOMY

A Forest Resilience Economy: Scaffolding of Employment Opportunities



*Job types within scaffolding are not comprehensive. They are used as examples to represent the range of job types and skill sets

Built on standards for job quality: living wages, job satisfaction, job mobility, year round employment

Whats next?

- Scale up to meet demand (H RTP Expansion award of 7.5 M)
- Continue growth of the network of Tribes involved in the Inter-Tribal Stewardship Workforce Initiative (ISWI)
- Expand an Inter Tribal Fire Initiative for cultural fire and fire response deployment
- Continue growing the employer network
- Navigate barriers to securing restoration contracts, and support tribal business development so more Tribes have capacity to serve as employers.





Thank you to the California Workforce Development Board and California Climate Investments for their support!



www.SierraInstitute.u

Additional slides:

The Pit River Tribe Greenhouse Project



Sierra Institute and the Pit River Tribe are partnering in an effort to launch the Tribe's 10-acre Greenhouse Project in Modoc County.

The Greenhouse Project will:

- Produce seedlings to support post fire reforestation efforts across the Sierra Nevada and North State
- Provide plants for riparian restoration especially for dam removal projects to support Salmon runs.
- Provide a economic growth and jobs for the Tribe and Modoc County
- Provide workforce training in plant nursery operations and management
- Provide local food (some greenhouses will be for fruits and vegetables to be delivered to Tribal membership)



Pit River Tribal Members, Community members, Sierra Institute staff and neighboring Tribes hold clean up days to restore the site.

atelierjones, llc
architecture | ecodesign | planning



BATHROOMS

OFFICE 1

STORAGE

COMMERCIAL
KITCHEN

SUNLIGHT ON
SUMMER
SOLSTICE

PATTERNED
FLOOR

OFFICE 2

RECEPTION

1800 SF



Roundhouse Council Indian Education and
Cultural Center



Commissioner Q&A



Panel 5

Workforce Development: How is Industry Making a Difference



Panel 5

Moderator:

Caroline Thomas Jacobs, Director, Office of Energy Infrastructure Safety

Panelists:

Jamie Martin, Vice President of Undergrounding, Pacific Gas and Electric Co.

Brian D'Agostino, Vice President of Wildfire and Climate Science, San Diego Gas & Electric Co.

Nichole Baxter, External Affairs Manager, California American Water

Neil Singh, Senior Manager, Income Qualified Programs Delivery, Pacific Gas and Electric Co.

Carter Prescott, Director, Customer Programs & Services, Southern California Edison Co.



Workforce Development: PG&E Major Infrastructure Delivery

Jamie Martin, Vice President, Undergrounding

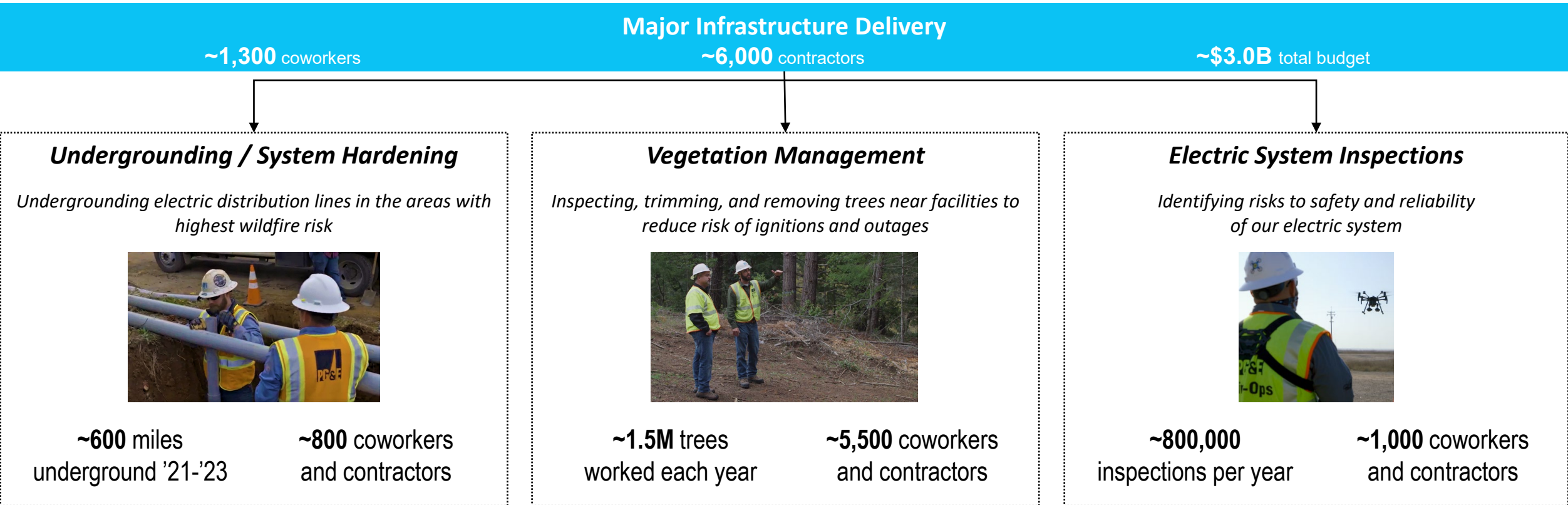
Pacific Gas & Electric Company

October 17, 2023



Major Infrastructure Delivery (MID) overview

MID has three functional areas that work together to increase wildfire safety and ensure the safe, reliable delivery of electricity.



Other functional areas across PG&E support MID Programs, including Electric Operations, Engineering and Support Services



PG&E is investing in three key pillars of workforce development

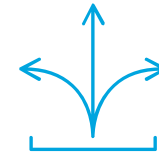
Training



**Professional Development
and Career Advancement**



New Opportunities



Vegetation Management

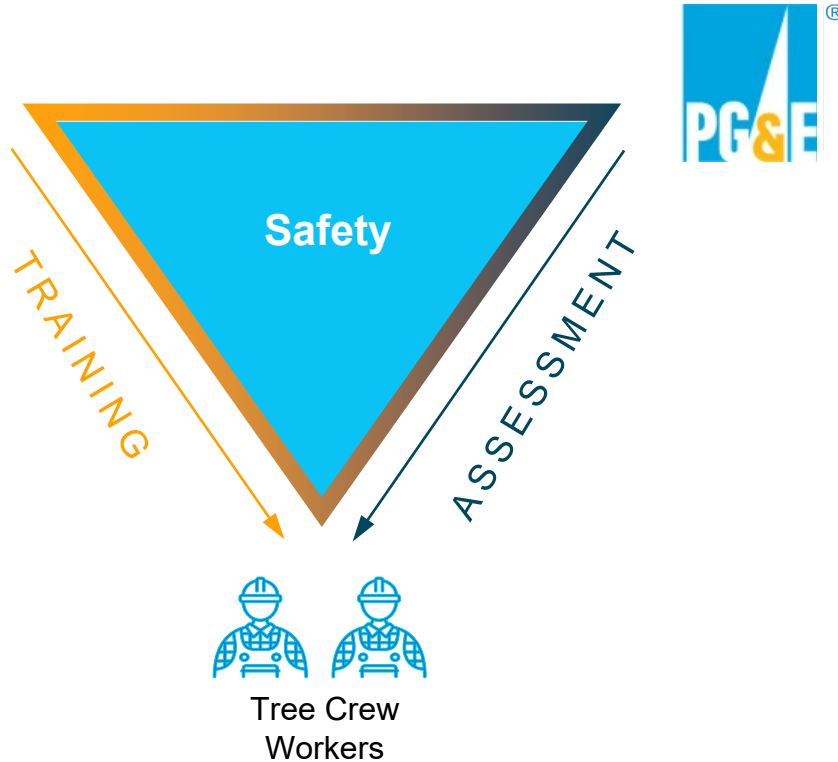
System Inspections

Undergrounding



Vegetation Management

In partnership with the IBEW, PG&E has established first-in-industry safety training & assessment for tree crews



In the interest of ensuring that each tree crew worker is safely and competently performing their job:

- 1 PG&E and IBEW have created a new safety program to train, assess, and track to perform / fund training for all tree crew workers
- 2 PG&E assesses the competency of tree workers before they perform a high-risk task in the field, competency will be reassessed every two years on each skill



Vegetation Management

PG&E has a robust inspection line of progression, supporting development and advancement for our represented co-workers

Vegetation Management Inspector

Primary duties:

- Patrolling in accordance with annual VM plan
- Tagging and prescribing work
- Supporting emergency response

Senior Vegetation Management Inspector

Primary duties:

- Direct oversight of VM work
- Responsibilities include overseeing field safety, quality, customer relations, permit compliance, and managing contractor performance

Vegetation Operations Inspector

Primary duties:

- Direct oversight of VM work
- Liaison to contractors to resolve obstacles
- Auditing of work performed by contractor crews

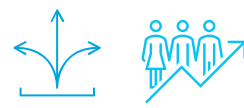


Progression from VMI to SVMI occurs automatically upon completion of training and accrual of experience



Progression from SVMI to VOI is based upon bidding system and accrued experience





System Inspections

In partnership with the IBEW, PG&E has created journey-level IBEW positions in support of inspection compliance, presenting a new opportunity for some of our most skilled electric co-workers

System Inspections Compliance Inspector

Primary duties:

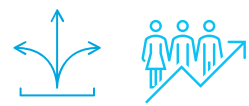
- Performing inspections for compelling abnormal conditions, regulatory conditions, and third party caused infractions that negatively impact safety or reliability of PG&E's distribution facilities

Training Requirements: Must be QP or QEW, coming from a Journeyman, Troublemaker, or Towerman background, and have completed PG&E's Systems Inspection structured learning plan





Undergrounding



PG&E is creating new IBEW inspector opportunities and a line of progression for Gas co-workers

New Undergrounding Inspector classification

(Available to coworkers and contractors with a gas background)

Primary duties:

- Inspection of underground construction civil construction with a specialization in electric equipment standards (Boxes, Conduit, Transformer Pads)
- Inspection of secondary and services (QEW not needed)
- Ensure site safety for contract construction resources

Training requirements:

- All certifications needed to be a gas civil inspector
- Additional training (to be developed) on inspecting secondary and services and reinforced steel

Training and line of progression

- Undergrounding Inspectors will have the option to earn a qualification in inspecting reinforced steel and structures
 - A corresponding training will be offered in partnership with the IBEW
- Lead Undergrounding Inspector positions will also be available in the line of progression as IBEW positions
- Underground Inspectors will be considered class B bidders allowing additional opportunities to bid into apprenticeship as electric workers.



Workforce Development

Brian D'Agostino, Meteorologist
VP – Wildfire and Climate Science
San Diego Gas & Electric

Strategic Academic Partnerships Preparing Future Workforce

- Advancing science to serve the region while preparing the next generation of the utility workforce.



Photo taken 10/5/2023: SDG&E's Office of Data Science touring San Diego Supercomputing Center and Halicioğlu Data Science Institute

Workforce Development within Vegetation Management

Collaboration with Education and Industry Partners developing future Utility Line Clearance Arborists

Key Partners

San Diego College of Continuing Education;
California Conservation Corps; Utility Arborist
Association; Joint IOUs

Program Overview

5-week classroom and field course
Professional safety trainers
SDG&E contractor participation
Job recruiting and placement following graduation

2022 Results

Two cohorts graduated (~40 graduates)
Approx. 60% successfully attained ULCA
employment
Expansion into new pre-inspector training module



Competitive Edge Job Training Program

- In 2022, SDG&E partnered with a coalition of partners that included local non-profits, subcontractors, and the International Brotherhood of Electrical Workers (IBEW Local) 465 to create a 6-week training course with a \$22/hr pay rate while in training.
- In July 2023, a second cohort of 21 young men and women – all from historically under-represented communities in the San Diego region graduated from the program and each one of them received a job offer.
- Throughout the program, each trainee was provided the chance to interview with participating local utility contractors, get enrolled in a labor union and placed in a skilled labor job or project administration.
- To provide interactive career exposure, SDG&E has hosted two cohorts of the program at our Skills Training Facility, so they can see first-hand the variety of job opportunities available in the utility industry.



Scholarship Programs to Support Future Workforce

- In 2023, SDG&E announced in partnership with IBEW, **the Lineworker Assistant Scholarship Program.**
- 15-week Electrical Lineworker training program worth over \$30,000 at Northwest Lineman College (NLC) in Oroville.
- Certifications achieved at graduation:
 - Climbing
 - Chainsaw Safety & Maintenance
 - CPR, First Aid, and Automated External Defibrillator
 - OSHA 10 Hour Training on Electrical T&D (OSHA 10 ETD)
 - Digger Derrick Safety
 - Enclosed-Space Rescue
 - Pole-Top Rescue
 - Aerial-Lift Rescue



SDG&E
POWER YOUR DREAMS
Lineworker assistant scholarship opportunity

At San Diego Gas and Electric (SDG&E), we are dedicated to creating a diverse and inclusive workplace while building the cleanest, safest and most reliable energy infrastructure company in America. And now, in partnership with IBEW Local 465, we are proud to announce the Lineworker Assistant Scholarship Program. This program will afford men and women a 15-week Electrical Lineworker training program worth \$30,000 at Northwest Lineman College in Oroville, California. Upon successful completion of the program, the scholarship winners will qualify for a rewarding career in the utility industry.

Deadline to submit application packet
April 10, 2023

Final candidates will be invited to attend the SDG&E Skills Training Center and will be required to pass a physical assessment that includes entry-level Lineworker skills, a DOT physical assessment, background screening, and drug test.

Applicant Eligibility

- Proof of residence in SDG&E service territory
- Able to verify Northwest Lineman College application requirements
- Write an essay on why the applicant would like to be a Lineworker, and how they will cover living expenses during NLC training (upload essay into application with your resume)
- Two reference letters (upload into application with your resume)
- Ability to perform heavy manual labor
- Ability to work in U.S. without sponsorship
- Minimum age of 18
- Submit completed application packet by April 10, 2023

Phase two of the screening process will include an online **SDG&E Field and Technical Assessment**

Apply Here
[QR Code]

LOCAL 465

- In 2023, SDG&E awarded ten, \$10,000 **STEM scholarships to local students** pursuing undergraduate studies.
- Many recipients were first-generation college students who face financial barriers to higher education.
- Scholarship winners who maintain their eligibility can have their scholarships renewed for an additional three years (Up to a total of \$40,000 in financial aid).
- Degrees being pursued by scholarship recipients include:
 - Biochemistry
 - Biology
 - Civil Engineering
 - Data Science
 - Marine Science
 - Mechanical Engineering
 - Neuroscience
 - Physics



SDG&E
POWER YOUR DREAMS
NEW Inspiring Future Leaders STEM Scholarship Program
For high school seniors, graduates or current college undergraduates

APPLY NOW

At San Diego Gas and Electric (SDG&E), we are dedicated to building a stronger, more diverse workforce in STEM fields where women and people of color have traditionally been underrepresented. To help bridge this equity gap, we are proud to announce the Inspiring Future Leaders STEM Scholarship Program for undergraduate studies.

Did You Know?
According to the U.S. Census Bureau and Pew Research, women only make up 27% of the STEM workforce, while people of color only make up 33%.

Timeline:

- Applications open: March 19
- Applications close: June 14
- Recipients notified: April 27
- Recipients notified: August
- Award payments sent to school: August

Deadline to submit application
April 27, 2023
1:00 p.m. PDT

Applicant Eligibility

- Self-identify as either:
 - Women of all races/ethnicities are eligible OR
 - Black or African American, American Indian or Alaska Native, Hispanic or Latino, Asian, Native Hawaiian or other Pacific Islander (all genders are eligible).
- Be high school seniors or graduates or current college undergraduates.
- Plan to enroll in full-time undergraduate STEM (science, technology, engineering, and mathematics) areas of study at an accredited two- or four-year college or university for the entire upcoming academic year.

Visit sdge.com/scholarship for full eligibility details.

\$10,000 Award
Renewable for 3 years*
*Recipients must maintain eligibility

Learn more
[QR Code]

Developing a Representative Future Workforce through Aligning with a Diverse Supplier Community

- SDG&E has exceeded the CPUC's supplier diversity goal for 18 consecutive years, and we're on track to make that 19 years with 2023 spend.
- In 2022, we spent nearly \$1B or approximately 40% of our spend with hundreds of diverse suppliers, creating and building generational wealth for communities historically overlooked for utility contracts.
- In partnership with our core suppliers, we've enhanced the way we score supplier proposals to include traditional areas like safety, quality, schedule and price – and added non-traditional areas like sustainability and workforce development commitments.
- With many thousands of jobs dependent on SDG&E's supply chain, we know we can't do it alone, and our contractors can be a force multiplier for community impact.

MINORITY BUSINESS ENTERPRISE (MBE)
SPEND WAS

**\$467.2 million
or 19.26 percent**



WOMEN BUSINESS ENTERPRISE (WBE)
SPEND WAS

**\$394.3 million
or 16.26 percent**



LESBIAN, GAY, BISEXUAL, TRANSGENDER
BUSINESS ENTERPRISE (LGBTBE)
SPEND WAS

**\$8.6 million
or 0.36 percent**



DISABLED VETERAN BUSINESS ENTERPRISE (DVBE)
SPEND WAS

**\$94 million
or 3.87 percent**



Workforce Development: How the Water Industry is Making a Difference

Nichole Baxter, External Affairs Manager
California American Water



About American Water



AMERICAN WATER

1 BILLION

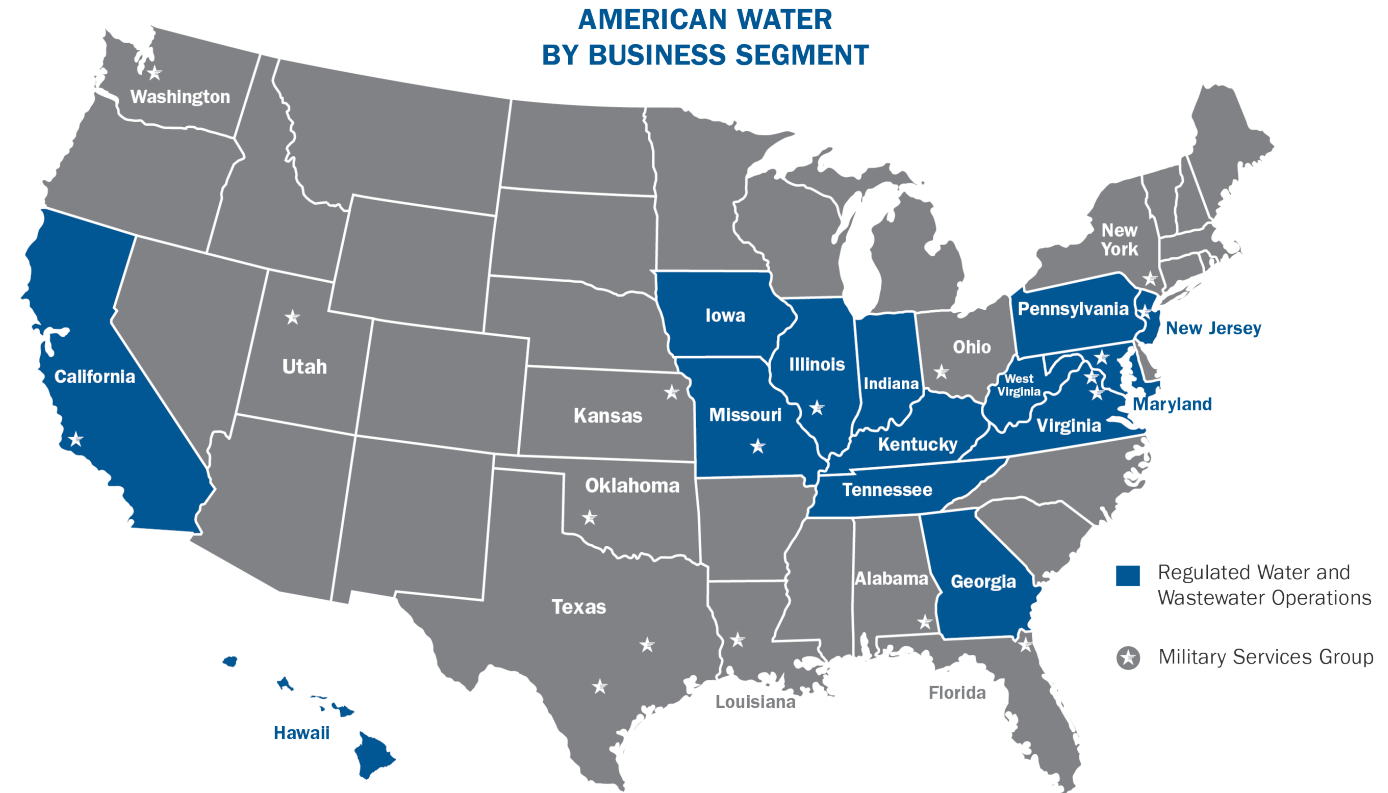
Gallons of water treated and delivered every day

6,500

Employees serving communities nationwide

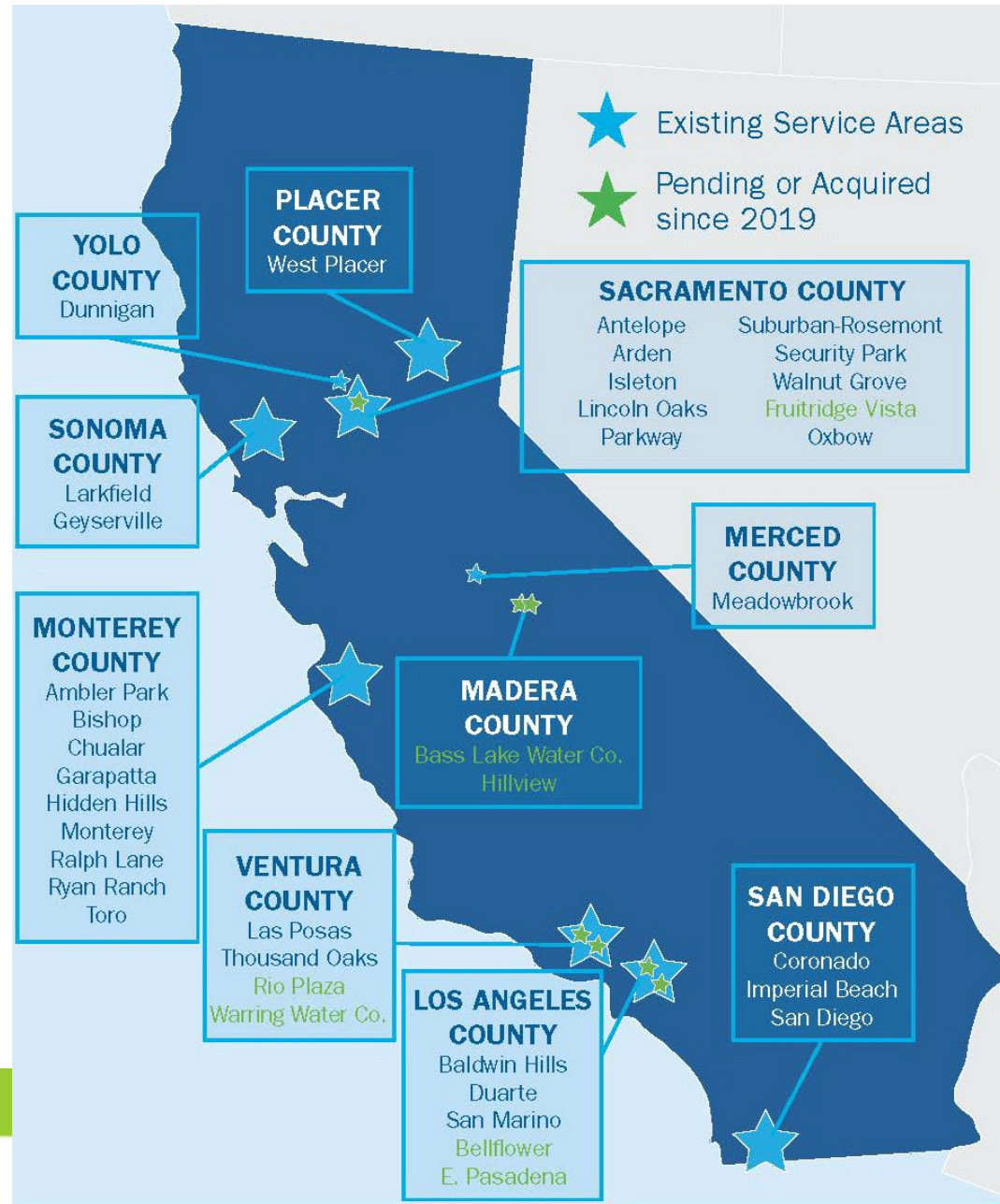
25+

Years receiving awards for quality



California American Water

We are members of



700,000

Customers throughout the state

324

Employees serving our communities

47%

Of our workforce is diverse*

How the Water Industry is Making a Difference



**California Water, Wastewater, and Energy
Workforce Development Program
\$4 million**

- Collective, statewide approach
- Create a workforce pipeline for underrepresented populations
- Ensure the ongoing placement of trained workers in industry jobs

The Partners

- California African American Water Education Foundation (CAAWEF)
- Water Education for Latino Leaders (WELL)
- Jewish Vocational Services (JVS)
- California Special Districts Association (CSDA)
- California Water Association (CWA)
- California Municipal Utilities Association (CMUA) ★
- Association of California Water Agencies (ACWA)
- California Association of Sanitation Agencies (CASA)
- Contra Costa Water District
- Metropolitan Water District of Southern California (MWD)
- Water Energy Education Alliance (WEEA)
- BAYWORK
- IEWorks
- California Nevada Section of American Water Works Association (CA-NV AWWA)

3 Major Components of the Program

1. Literature Review and Supplemental Needs Assessment
2. Develop, Pilot, and Implement Regional Consortium
3. Statewide Activities



About Our Jobs



- High Quality and Well-Paid Jobs with Great Benefits
- Climate Change and Environmental Sustainability
- Statewide Development is Crucial

Beyond the New H RTP Program



- Charitable Foundation Grants
- Paid Intern Program
- Local Partnerships: Village Project, American River College
- More!

Partners Along the High Road



Energy Savings Assistance (ESA) Program

Neil Singh

Senior Manager, Income Qualified Programs Delivery
Pacific Gas and Electric Company

Workforce Development in Energy Savings Assistance Program (ESA)

What is ESA?

The PG&E ESA program uses a prescriptive, direct install approach utilizing a network of locally based subcontractors who work for our two regional implementers to provide free home weatherization, energy efficiency (EE) appliances, and energy education to income-qualified customers throughout PG&E's service area. PG&E customers living in single-family (SF), multifamily (MF), and mobile homes (MH), including homeowners and renters, are eligible to participate.^[3]

^[3] To qualify for the ESA program, the total customer household income must be equal to or less than 250% of the Federal Poverty Guideline (FPG), with income adjustments for family size. The program increased its income level from 200% FPL to 250% FPL on July 1, 2022 pursuant to Senate Bill (SB) 756.

ESA Workforce Challenges

- The ESA program has shifted towards deeper energy savings so that customers treated by the program experience significant bill savings. This is a shift from the traditional program which historically focused on basic items such as weatherstripping, caulking, light-emitting diodes (LEDs), etc.
- As a result, heat pump technologies are now being prioritized. Contractors must have the appropriate training and licensing to install these measures. This presents a challenge as many of the current weatherization employees do not possess the required licensing to install these measures.
- While this is a new challenge, it is also an opportunity to provide training pathways so that the ESA employees can have a higher-level skillset that is marketable beyond the ESA program.

Workforce Development in ESA

Educate: Coordinate ESA Contractor Training with PG&E's Workforce Education & Training (WE&T) Program

- ESA Contractor Training is required for all ESA contractors, including weatherization specialists (installation crews), energy specialists (assessors/educators), and Natural Gas Appliance Testing (NGAT) technicians.
- Training topics include safety, ESA home assessment, energy education, customer service, weatherization services and measure installation.
- ESA Contractors are also notified of no-cost technical upskill training and other resources available through Investor-Owned Utilities WE&T programs.
- Focus: provide skills and work experience that are transferable to other demand-side energy management roles and clean energy jobs.

Employ: Support Community Capacity Building

- ESA contractors typically recruit and hire field personnel within their respective local communities.
- Current program cycle promotes/tracks workforce development in Disadvantaged Communities (DACs).

Opportunities

Create linkages between job seekers graduating from pre-employment and construction education programs

- Leverage /deepen partnerships with training programs
 - UpSkill California
 - Career and Workforce Readiness (CWR) program/Energize Careers
- Provide trainings on new measures/technologies
- Post opportunities on a variety of job boards including the Cal JOBS website, veterans and workforce development and Community Based Organization (CBO) boards, word of mouth and other online sites.

Manage and Communicate with ESA Workforce

Workforce is a fundamental component in PG&E's ability to meet ESA energy savings targets and homes treated goals

- Workforce management: The ability to build-up and/or reallocate existing workforce within ESA's portfolio of programs provide the agility needed throughout different phases of implementation.
- Weekly meeting with Implementors
 - ESA Contractor Training (standing agenda item)
 - WE&T resources (example: CWR/Energize Careers)
 - Communicating workforce challenge (example: COVID-19)
- Weekly communication with ESA Implementors/Contractors
- Implementers act as a bridge to existing career opportunities and provide information/roadmap on the skills/trainings required to transition to other roles.

Statewide EE Workforce Education & Training (WE&T)

Carter Prescott, Director of Advanced Energy Solutions
Southern California Edison
October 17, 2023



Statewide EE Workforce Education & Training (WE&T)

Statewide EE WE&T Components

1. Career Connections (CC)

- Statewide 3rd Party Program targeting K-12 students and teachers
- PG&E is lead Administrator
- Implemented by The Energy Coalition (TEC)
- Program Name: Energy is Everything

2. Integrated Energy Education & Training (IEET)

- “Local” program for upskilling current and incoming workforce on energy efficiency best practices, and other topics of relevance
- Implemented locally by SoCalGas, SCE, SDG&E, and PG&E
- Also known as Energy, Training, or Innovation “Centers”

3. Career and Workforce Readiness (CWR)

- Statewide 3rd Party Program focused on disadvantaged workers*
- PG&E is lead Administrator
- Implemented by Strategic Energy Innovations (SEI)
- Program name: Energize Careers



*A disadvantaged worker is “an individual that lives in a household where total income is below 50 percent of Area Median Income; is a recipient of public assistance; lacks a high school diploma or GED; has previous history of incarceration lasting one year or more following a conviction under the criminal justice system; is a custodial single parent; is chronically unemployed; has been aged out or emancipated from the foster care system; has limited English proficiency; OR lives in a high unemployment ZIP code that is in the top 25 percent of only the unemployment indicator of the CalEnviroScreen Tool.”

Statewide EE Workforce Education & Training (WE&T)

1. Career Connections (CC)

- Overarching Goal: Raise K-12 student's energy awareness and exposure to energy career pathways to prepare students for a future energy career
- Implementer and Name: The Energy Coalition, Energy is Everything (EisE)
- Audience and Targets: 500 K-12 Schools
 - 30,000 students
 - 1,000 teachers
 - 80% of schools will be disadvantaged*
- Program Website: www.energy-is-everything.org

*Students from local education providers classified as disadvantaged by meeting one or more of the following criteria: 1) Classified as Title 1; 2) Classified as Free and Reduced Price Meal (FRPM) above 40%; 3) Located in a zip code scoring in the top 25% statewide per CalEnviroScreen 3.0; 4) Classified as rural

EE Workforce Education & Training (WE&T)

2. Integrated Energy Education & Training (IEET)

- Train and support the **incumbent workforce** to reduce energy use in buildings they design, build, operate, and maintain;
- **Collaborate** with post-secondary **education institutions and professional organizations** to expand and enhance energy efficiency parts in their programs

General Audiences

- Incumbent workforce
- Incoming workforce
- Post-secondary programs
- Disadvantaged workers

Curriculum Tracks

- Agriculture & Industrial
- Existing Whole Building
- Commercial Food Service
- Home Performance
- HVAC
- Lighting
- New Whole Building
- Electrification (X-cutting)

Sample Occupations

- Engineers
- Architects / Designers
- General Contractors
- Building Operators
- Developers / Builders
- HVAC Contractors



EE Workforce Education & Training (WE&T)

2. Integrated Energy Education & Training (IEET)

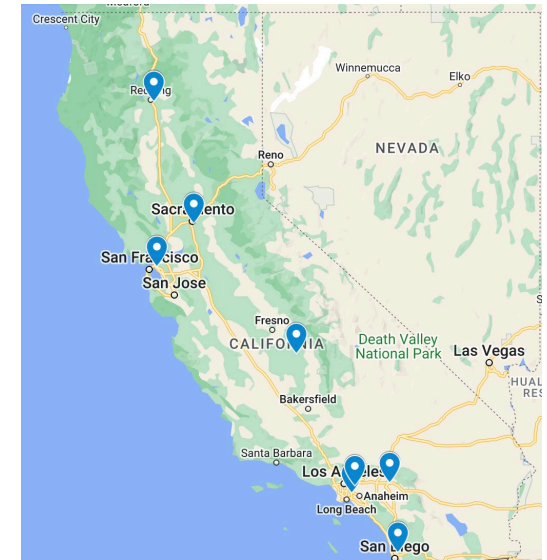
- Overarching Goal: Train and support the current and incoming workforce to decarbonize buildings and facilities
- Implementer / Name: Implemented locally by all four IOUs
- Program Targets:
 - # of collaborations to jointly develop/share training materials/resources
 - # of participants (attendance)
 - % of participation relative to eligible target population
 - % of WE&T participants meeting definition of disadvantaged worker*
 - # of CWR participants employed for 12 mos. after receiving the training

*A disadvantaged worker is “an individual that lives in a household where total income is below 50 percent of Area Median Income; is a recipient of public assistance; lacks a high school diploma or GED; has previous history of incarceration lasting one year or more following a conviction under the criminal justice system; is a custodial single parent; is chronically unemployed; has been aged out or emancipated from the foster care system; has limited English proficiency; OR lives in a high unemployment ZIP code that is in the top 25 percent of only the unemployment indicator of the CalEnviroScreen Tool.”

Statewide EE Workforce Education & Training (WE&T)

3. Career & Workforce Readiness (CWR)

- Overarching Goal: a) Provide disadvantaged workers* support services and training to address barriers to being part of the energy workforce; b) Place, support, and retain disadvantaged workers in jobs where they use skills
- Participant Journey: Accept → Train → Place → Retain 12 mos.
- Implementer: Strategic Energy Innovations
- Program Name: Energize Careers
- Program Website: www.energizecareers.org

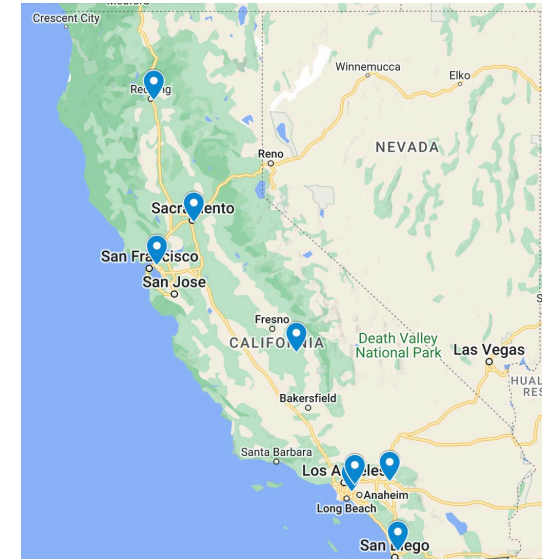


*A disadvantaged worker is “an individual that lives in a household where total income is below 50 percent of Area Median Income; is a recipient of public assistance; lacks a high school diploma or GED; has previous history of incarceration lasting one year or more following a conviction under the criminal justice system; is a custodial single parent; is chronically unemployed; has been aged out or emancipated from the foster care system; has limited English proficiency; OR lives in a high unemployment ZIP code that is in the top 25 percent of only the unemployment indicator of the CalEnviroScreen Tool.”

Statewide EE Workforce Education & Training (WE&T)

3. Career & Workforce Readiness (CWR)

- Implementer: Strategic Energy Innovations
- Program Name: Energize Careers
- Program Website: www.energizecareers.org
- Program Targets: Disadvantaged workers*
 - 18 collaborations
 - 1000 participants enter the program
 - 700 placed into jobs
 - 490 remain in jobs for 12 months



*A disadvantaged worker is “an individual that lives in a household where total income is below 50 percent of Area Median Income; is a recipient of public assistance; lacks a high school diploma or GED; has previous history of incarceration lasting one year or more following a conviction under the criminal justice system; is a custodial single parent; is chronically unemployed; has been aged out or emancipated from the foster care system; has limited English proficiency; OR lives in a high unemployment ZIP code that is in the top 25 percent of only the unemployment indicator of the CalEnviroScreen Tool.”

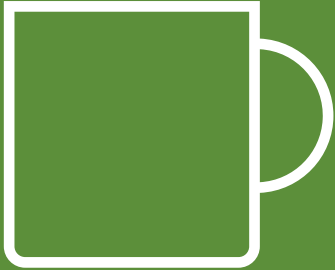
Statewide EE Workforce Education & Training (WE&T)

CWR Training Partner Summary

Training Partner	Region	Training Topic(s)	Training Duration
The Trade School	Redding	Electrical, carpentry	Evening courses, multiple semesters
Sacramento City College	Sacramento	HVAC and industrial maintenance	2-year certification program in commercial HVACR. 1-year certification in residential HVACR
Rising Sun	East SF Bay Area	EE and construction trades	10- to 12-week training for Opportunity Build program
Proteus	Central Valley	EE, renewable energy, electrical, construction	350-hour, 10-week training class. Starts every 6 weeks and is offered around 9 times per year
Prospective Training Partner	South SF Bay Area	HVAC technician	8 weeks, half day courses
Rio Hondo College	Los Angeles	Architectural design, TESLA EVs and storage	Architecture program is about 3-4 semesters; EV and energy storage is a 16-week intensive program
Cerritos College	Los Angeles	EE auditing, construction, EV charger maintenance	40-80 hours of classroom training
Inland Empire Electrical Training Center	Inland Empire	Inside wireman training and apprenticeships	5-year apprenticeship program
San Diego Electrical Training Institute	San Diego & Imperial Counties	Inside wireman training and apprenticeships	5-year apprenticeship program



Commissioner Q&A

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Public Comment

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Once called, each speaker has 1 minute at the discretion of Commissioner Shiroma. If a large number of callers wish to speak, the time limit may be changed to accommodate all callers.

A bell will ring when the time has expired.



Closing Remarks

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Thank You!