CLEAN ENERGY
SECTOR PARTNERSHIP

HAWAIʻI STATE ENERGY OFFICE

UNIVERSITY of HAWAIʻI COMMUNITY COLLEGES

DBEDT
STATE OF HAWAII • DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

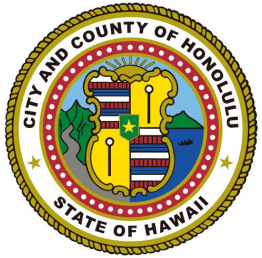
Good Jobs HAWAIʻI

Full Partnership Meeting

February 7, 2024
3:00pm - 4:30pm

Meeting will begin shortly…
Please introduce yourself in the chat!

Mahalo to our Funders



and our Conveners

Mahalo to our Steering Committee

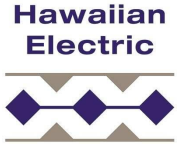
Office of Economic Development

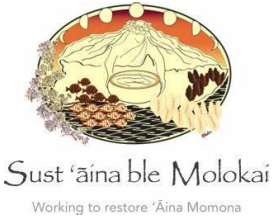
COUNTY OF HAWAI'I
RESEARCH & DEVELOPMENT

Ka ʻOihana ʻŌnaepuni ʻŌmaʻomaʻo O Hawaiʻi
Hawai'i Green Infrastructure Authority

HAWAII CARPENTERS APPRENTICESHIP & TRAINING FUND

HAWAI'IGAS





Mahalo to our Industry & Community Invitees

174 Power Global
AEE
AES Hawaii
Aina Aloha Economic Futures
Aloha Carbon
Aloha Petroleum
Altus Power (Tritium 3)
Ameresco - Pu'uloa Energy & Solar
BIA Hawaii
Biki
Blue Ocean Barns
Blue Planet Foundation
Boilermakers Local 627
Brookfield Renewables
Building Industry Association of Hawaii
Cellana
City and County of Honolulu
Clearway Energy
UH College of Tropical Agriculture & HR
Council for Native Hawaiian Advancement
County of Hawaii
County of Kauai
County of Maui
Covanta
Cyanotech
DibsHawaii
Distributed Energy Partners
EarthJustice
EDF Renewables
Elemental Excelerator
Energy Equity Hui
Essential Leap, LLC
Eurus Energy
Ewalu Industries
G70
Haleakala Solar
Harold K.L. Castle Foundation
Hawaii Agricultural Foundation
Hawaii Airconditioning
Hawaii Auto Dealers Association
Hawaii Building & Construction Trades Council
Hawaii Building Maintenance
Hawaii County Dept. of HR
Hawaii Carpenters Apprenticeship & Training Fund
Hawaii Dept. of Accounting & General Services
Hawaii Department of Agriculture
Hawaii Department of Education
Hawaii Department of Transportation
Hawaii Energy
Hawaii Energy Systems LLC
Hawaii Farm Bureau
Hawaii Gas
Hawaii Green Growth
Hawaii Natural Energy Institute
Hawaii Operating Engineer Industry Stabilization Fund
Hawaii P-20 Partnership for Education
Hawaii Pacific University
Hawaii Petroleum
Hawaii Regional Council of Carpenters
Hawaii Solar Energy Association
Hawaii Technology Development Corporation
Hawaii Transportation Association
Hawaiian Electric
Hawaiian Native Corporation
HCATT
Hoahu Energy Cooperative Molokai
Holomua Collective
Holu Hou Energy
Honolulu Bicycling League
HPM Building Supply
IBEW Local 1186
IBEW Local 1260
IBEW Local 1357
Innergex
Inter-Island Solar Supply
Island Energy Services
JN Automotive
Johnson Controls
Kaala Farm
Kalaeloa Energy Partners
Kamehameha Schools
Kauai Island Utility Cooperative
Kauai Petroleum Inc.
KumuKit
Kupono Solar Development LLC
Kupu
Legasea Energy
Lei Foundation
Local 627 Boilermakers
Longroad Energy Holdings, LLC
Longroad Development Company, LLC
Mahi Pono
Makaha Learning Center
Malama Solar
Maui Economic Development Board
Maui Oil Co.
Molokai Affordable Housing Alliance
Moss & Associates, LLC
Native Hawaiian Education Council
Natural Energy Laboratory of Hawaii Authority
Nexamp
Oceanit
Office of Hawaiian Affairs
Ormat Technologies
Pacific Biodiesel
Pacific Current LLC
Pacific Resource Partnership
Par Hawaii
PBR Hawaii
Photonworks
PICHTR
Planning Solutions
Plumbing & Pipefitting Local 675
Plus Power
Pono Home
Progression Energy
Pulama Lanai
Puuloa Energy
PVT Land Co.
QRSE
REC Solar
Revolusun
Roberts Hawaii
Servco Pacific
Shake Energy Collective
Shifted Energy
Sierra Club
Simonpietri Enterprises
Solaray Corp
SSFM International
Stantec
State of Hawaii Dept. of Agriculture
State of Hawaii Dept. of Transportation
SunPower
SunRun
Sustainable Molokai
Swinerton
Tawhiri Power - Pakini Nui Wind Farm
TerraForm Power
The Institute for Human Services (IHS)
Toledo Associates
Ulupono Initiative
UH College of Tropical Agriculture and Human Resources
UH Natural Disaster Preparedness Training Center
Zero Waste Hawaii Island

Today's Agenda

CLEAN ENERGY SECTOR PARTNERSHIP

Time	Topic	Speaker
10 min	Welcome and Introductions	Cam Black, Hawaii State Energy Office
5 min	Good Jobs Hawaii Updates	Marshall Norman, UH Community Colleges
10 min	Introducing our Priority Workgroups	Keala Peters, Chamber of Commerce Hawaii
5 min	Career Awareness: HIDOE CTE Energy Pathway Overview	Parker Kushima, Hawaii State Energy Office Troy Sueoka, HIDOE Office of Curriculum & Instructional Design
5 min	Interim Credential Program	Mimi Sroat, IBEW 1186
10 min	Apprenticeships & Training: - Good Jobs Hawaii Trainings - DLIR Registered Apprenticeships	Nicolette van der Lee, UH Community Colleges Edgar Fernandez & Jaimee Tabangay, DLIR
5 min	Poll: Next Phase of Training	Jo Ann Cantu, Hawaii State Energy Office
25 min	Breakouts: Priority Workgroups - Career Awareness - Student Preparation & Pre-Apprenticeships - Apprenticeships & Training	Cam Black, Hawaii State Energy Office - Duckie Irwin, Makaha Learning Center - Robert Aquino, IBEW 1186 - Jenny Tanaka, Hawaii Gas
10 min	Report Back	Workgroup Leads
5 min	Next Steps & Key Dates	Cam Black, Hawaii State Energy Office

CESP Timeline

MAY 2023

Skilled Trades/Clean Energy Analysis Completed

Held Steering Committee Meeting #1

JUNE 2023

Held Steering Committee Meeting #2

Began identifying priority training needs

Began creating new trainings with UHCCs + Good Jobs HI

AUG 2023

Steering Committee Meeting #3

OCT 2023

Full Clean Energy Sector Partnership Meeting #1

Continue identifying training needs & creating new trainings

Begin identifying sector priority initiatives

JAN 2024

Steering Committee Meeting #4

TODAY

Full Clean Energy Sector Partnership Meeting #2

Introduce Priority Workgroups

FALL 2025

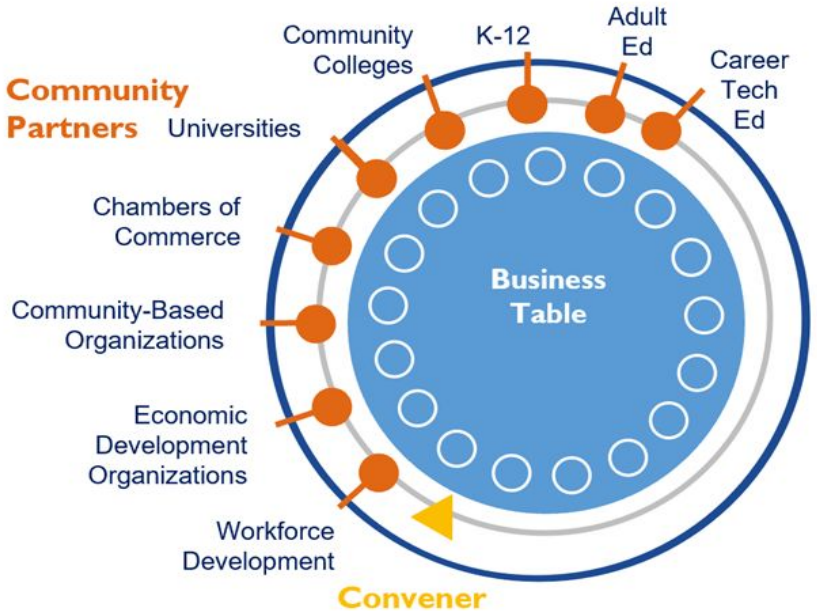
Good Jobs Hawaii Grant Period Ends

Assess future & identify resources

Sector Partnerships are Industry-led

Employers partner with us on:

1. Identifying in-demand entry-level occupations
2. Developing career pathways from entry-level jobs
3. Desired skills-training
4. Providing on-the-job training
5. Entry-level employment



Sector Partnership Governance

CREATIVE INDUSTRIES SECTOR PARTNERSHIP

Steering Committee

A select group of industry leaders that guides the Sector Partnership

Steering committee meets quarterly

Full Partnership Members

A broader group of 100+ stakeholders from industry, education, government and community

Full partnership meets quarterly to address shared priorities

Priority Workgroup 1

A subset of Full Partnership members participate in workgroups to focus on different priority initiatives

Workgroups meet as needed

Priority Workgroup 2

Workgroups meet as needed

Priority Workgroup 3

Workgroups meet as needed

Sector Partnerships in Hawai‘i

SECTOR	CONVENERS	ESTABLISHED	PRIORITY WORKGROUPS
Healthcare	Healthcare Association of Hawaii (HAH) & Chamber of Commerce	2018	1. Career Awareness 2. Training & Transitions to Employment 3. Curriculum Support
Technology	Chamber of Commerce Hawaii	2022	1. Career Awareness 2. Training & Transitions to Employment 3. Alignment Between Education & Industry
Clean Energy/ Skilled Trades	Hawaii State Energy Office (HSEO)	Fall 2023	1. Career Awareness 2. Student Preparation & Pre-Apprenticeships 3. Apprenticeships & Training
Creative Industries	Hawaii Creative Industries Division	Fall 2023	1. Career Awareness 2. Training & Internships 3. Infrastructure & Support
Engineering	Chamber of Commerce Hawaii	2018	1. Career Awareness 2. Women in STEM 3. Math Readiness 4. Talent Recruitment & Retention
Natural Resources	KUPU	2022	1. Career Awareness 2. Connecting Students to ‘Āina & Community 3. Investing in College & Career Prep., Access, & Transitions

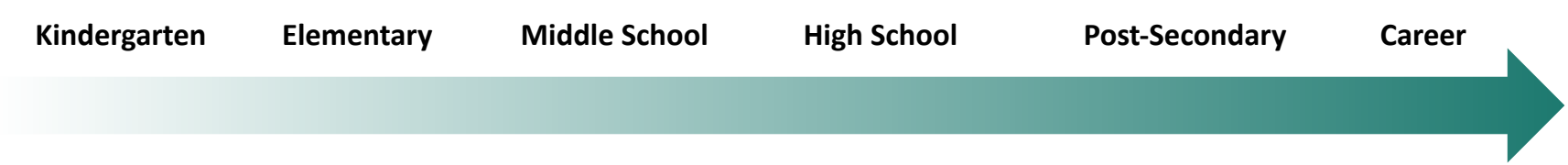
Good Jobs HAWAI‘I

Chamber of Commerce HAWAII

Community of Practice

Developing a Clean Energy Career Pathway

Vision: *for every clean energy job in Hawai‘i there is a qualified local candidate.*



Awareness	*Exploration*	*Preparation*	*Training*	*Advancement*

CLEAN ENERGY SECTOR PARTNERSHIP

Clean Energy Sector Updates to Note

- Save the date: Hawaii Energy Conference, May 22 - 23 @ Maui Arts & Cultural Center
- UH National Disaster Preparedness Training Center Courses
  - NDPTC Course Catalog (hawaii.edu)
  - Contact: Kirsten Baumgart Turner (NDPTC) - kbturner@hawaii.edu
- USDOE Home Energy Rebates Program (Hawaii)
  - Home Energy Rebates Programs | Department of Energy
  - Hawaii State Energy Office website - Energy Efficiency Programs, Rebates, and Solar Initiatives - Hawai‘i State Energy Office (hawaii.gov)
  - Contact: Claudia Rapkoch (HSEO) - claudia.l.rapkoch@hawaii.gov or Cameron Black (HSEO) - cameron.b.black@hawaii.gov
- USDOE Energy Auditor Training Grant
  - Concept papers due March 28; Applications due June 28
  - Energy Auditor Training Grant Program | Department of Energy
- Any other announcements - please put them in the Zoom Chat!

USDOE Home Energy Rebates Program (Hawaii)

- Hawaii's total allocation is $69.8M (split between HEAR and HER/HOMES)
- Hawaii State Energy Office will administer Hawaii's allocation

Home Electrification and Appliance Rebates (HEAR)

- Eligible for specific ENERGY STAR appliances and certain building / electrical materials
  - Heat pump water heating, split A/C units, induction cooktops
- Only for households <80% - 150% AMI
- Higher rebates for households <80% AMI
- HSEO looking to rollout in Summer 2024

Home Efficiency Rebates (HER/HOMES)

- Eligible for home retrofits that reduce energy use
  - Insulation, ventilation improvements
- Rebate ($) amount based on energy savings
- Higher rebates for households <80% AMI
- Improvements must be on or after August 16, 2022
- Requires pre-audit, data access, post-inspections
- HSEO looking to rollout in Fall 2024

Qualified Contractor Duties and Incentives

- Qualified Contractor Duties
  - Compliance with all regulations and requirements in state implementation plans
  - Record keeping and invoicing
  - Training and certification requirements
- Qualified Contractor Incentives (Hawaii)

Qualifying Activity (per dwelling unit)	Max Incentive
Install stove, cooktop, range, or oven	$0
Install electric wiring or electric load service centers	$0
Install electric heat pump for heating and cooling (ducted)	$50
Install electric heat pump for heating and cooling (unducted)	$150
Install electric heat pump water heater	$150
Install insulation	$150
Install air sealing and materials to improve ventilation	$150
Bonus for combined heat pump + insulation or air sealing in disadvantaged community, an 80% AMI household, or low-income multi-family building	$150
Maximum total incentive per dwelling unit Maximum total incentive per multi-family building	$500 $10,000

Becoming a Qualified Contractor

- HSEO to create and publish a list of approved Qualified Contractors
  - Criteria may include performance industry credentials, training requirements, business insurance and licensure, skills standards, and labor standards
  - USDOE Building Science Education | Building Science Education (energy.gov)
- Contractors interested in becoming Qualified Contractors should contact HSEO
  - Contractors must understand all program duties and incentives
  - Building Performance Institute Fact Sheet - 12.23-Residential-Rebates-in-the-Inflation-Reduction-Act.pdf (building-performance.org)

Training for Residential Energy Contractors

- Grow and train diverse and qualified workforce for ‘rebate eligible work’
  - Like the Home Energy Rebates Program, workforce development prioritizes communities
- Reduce training costs
- HSEO to begin developing training in 2024 w/ workforce and community partners
  - HSEO issued solicitation in December 2023 and now entering contract phase
- Build off Good Jobs Hawaii trainings now under development w/ UHCC and AEE
  - Certified Energy Manager
  - Certified Energy Auditor
  - Energy Efficiency Program

Good Jobs Hawaiʻi Updates

Marshall Norman

University of Hawaiʻi

CLEAN ENERGY SECTOR PARTNERSHIP

Good Jobs Challenge Data Update

Summary of data reported to quarterly to the Economic Development Administration

Note: Data is subject to change as data parameters are refined and reclassified.

	Grant Total	Clean Energy Sector
Participants Admitted	3268	446
Participants Enrolled	2125 *Year 1 and 2 Goal Met*	311 *Year 2 Goal Met*
Completers	926 *Year 1 Goal Met*	224 *Year 2 Goal Met*
Employment		Employed in-field by an employer who partners with your training program 77 Employed in-field by an employer who doesn't partner with your training program 71 Still seeking employment in-field 56

How Can Industry Partners Engage with GJHI?

Level One Engagement

- Sign the Pledge
- Join Sector Partnerships (IT, healthcare, clean energy, creative industries)
- Provide input on training needed

Level Two Engagement

- Hire UHCC Good Jobs Graduates ($2,000 funding per participant)

Provide internships to high school and UHCC Good Jobs Trainees ($2,000 funding per participant)

- Upskill current employees (fully subsidized)
- Request Funding for 3rd Party Training(6-8 months to process)

Good Jobs HAWAIʻI

Good Jobs HAWAIʻI

goodjobshawaii.org

Ways employers can engage with Good Jobs

- Sign Good Jobs Hawaii Pledge
- Propose and develop new trainings
- Recruit trained UHCC students for paid internships or employment
- Upskill current employees

Recruit trained UHCC Students for Paid Internship or Employment

START HERE

EMPLOYER: Expand Talent Pipeline

Share your hiring needs in a 1:1 onboarding session

JOBSEEKER: Enroll and complete free skills training at UHCC

Upon completion, students are matched with interested employers

- Paid Internship
  2 - 4 months → Employment
- Employment

Employer receives $2,000 for hiring a Good Jobs graduate as an intern or employee

ECONOMIC DEVELOPMENT
ALLIANCE OF HAWAII

On the Job Placements
(including internships)

Expand Industry Partner Pipeline

Facilitate Trainings

300 PLACEMENTS

- **HEALTHCARE**
  - HAH Healthcare Association of Hawaii
  - Chamber of Commerce HAWAII
- **TECHNOLOGY**
  - Chamber of Commerce HAWAII
- **CLEAN ENERGY/ SKILLED TRADES**
  - HAWAI'I STATE ENERGY OFFICE
- **CREATIVE INDUSTRIES**
  - creative industries HAWAII

ECONOMIC DEVELOPMENT
ALLIANCE OF HAWAII

Introducing our Priority Workgroups

Keala Peters

Chamber of Commerce Hawaii

CLEAN ENERGY SECTOR PARTNERSHIP

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Good Jobs HAWAI‘I

Chamber of Commerce HAWAII

Community of Practice

CESP Steering Meeting Input

Which of the recommendations from the Skilled Trades & Clean Energy Workforce Analysis should the Clean Energy Sector Partnership prioritize? Select up to 3

1. **Increase Early Exposure to the Skilled Trades (63%)**
2. **Address Student Readiness (50%)**
3. **Promote Careers in the Skilled Trade (38%)**
4. **Emphasize Upskilling of Existing Workforce in New Technologies (38%)**
5. **Increase Industry-Education Collaboration (38%)**
6. Reduce Personal Barriers to Success (25%)
7. Improve Access to Trades Educators (25%)
8. Increase Industry Cooperation (13%)

CLEAN ENERGY SECTOR PARTNERSHIP

CESP Priority Workgroups

CLEAN ENERGY SECTOR PARTNERSHIP

Goal: Creating a Clean Energy Kindergarten-Career Pathway

Kindergarten | Elementary | Middle School | High School | Postsecondary | Career

Workgroup 1: Career Awareness

Mission: To increase awareness of careers in skilled trades and clean energy among Hawaii residents, including students, parents, and educators.

Potential Activities:

- Educator externships
- Guest speakers and presentations
- Parent & family engagement

Workgroup 2: Student Preparation & Pre-Apprenticeships

Mission: To prepare Hawaii residents for apprenticeship programs in skilled trades and clean energy.

Potential Activities:

- Work-based learning
- Field trips
- Career pathway advising
- Mentorships

Workgroup 3: Apprenticeships & Training

Mission: To train Hawaii residents for careers in skilled trades and clean energy.

Potential Activities:

- GJH training courses and job placements
- Upskilling incumbent workers

CESP Priority Workgroups

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- GJH training courses and job placements
- Upskilling incumbent workers

Career Awareness:
HIDOE CTE Energy Pathway Overview

Parker Kushima
HSEO

Troy Sueoka
HIDOE Office of Curriculum & Instructional Design

CLEAN ENERGY SECTOR PARTNERSHIP

OFFICE OF

Curriculum & Instructional Design

Career and Technical Education Update

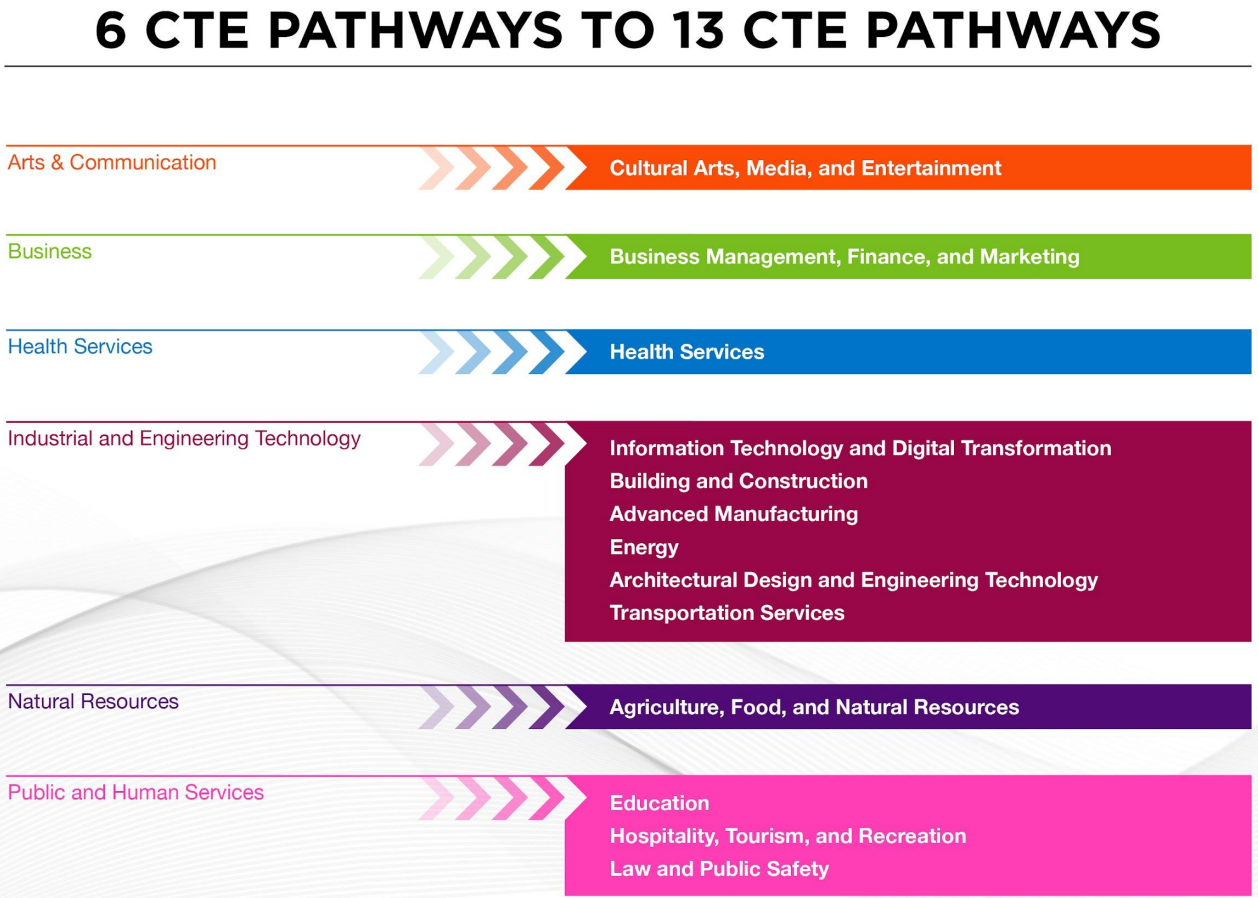
Clean Energy Sector Partnership Meeting
February 7, 2024

Troy Sueoka, CTE Educational Specialist

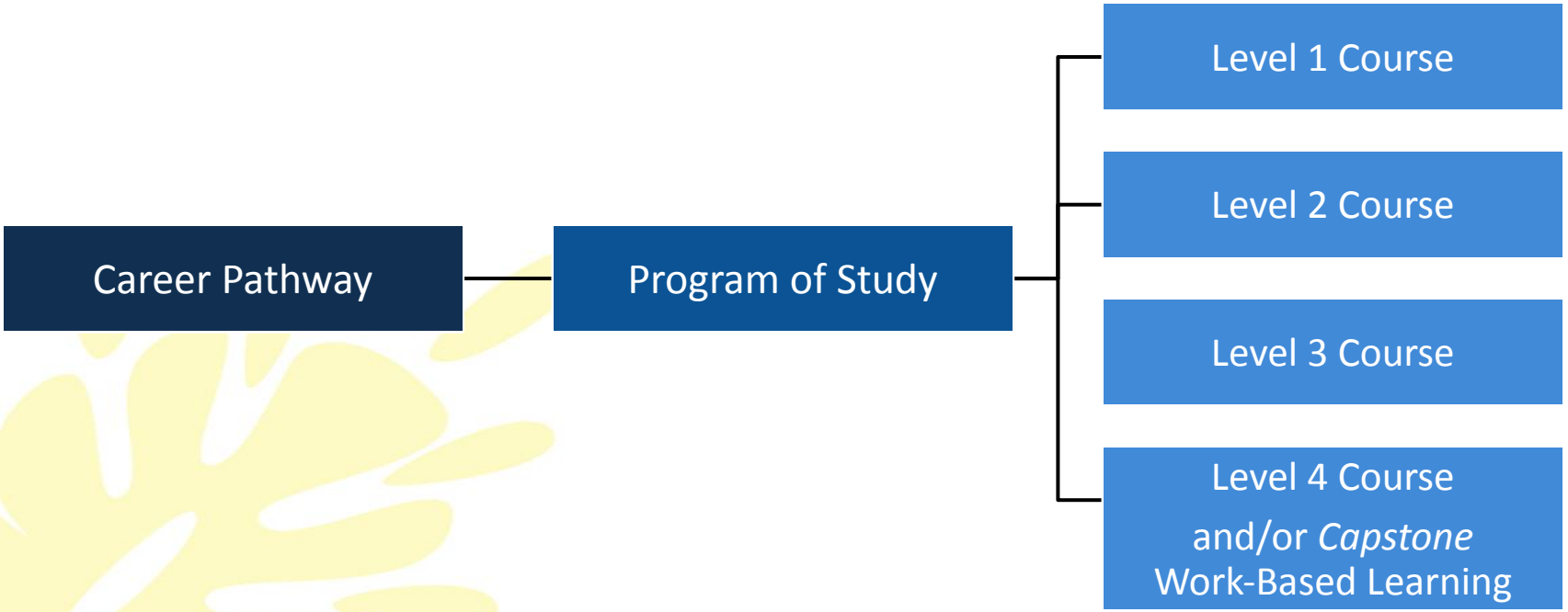
The Department has expanded its CTE industry pathways from 6 to 13 to better reflect and serve the state's economy.

[6-13 CTE Pathways]

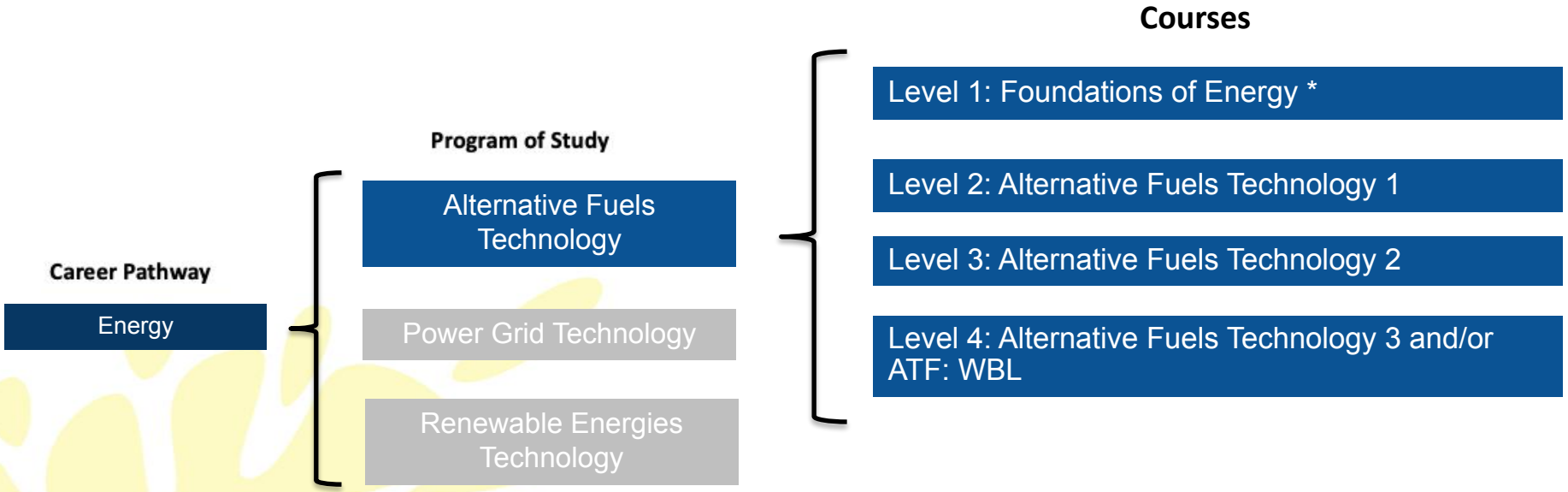
[Draft 13 Pathways and POS v1.6]



Organization of HIDOE CTE Career Pathways

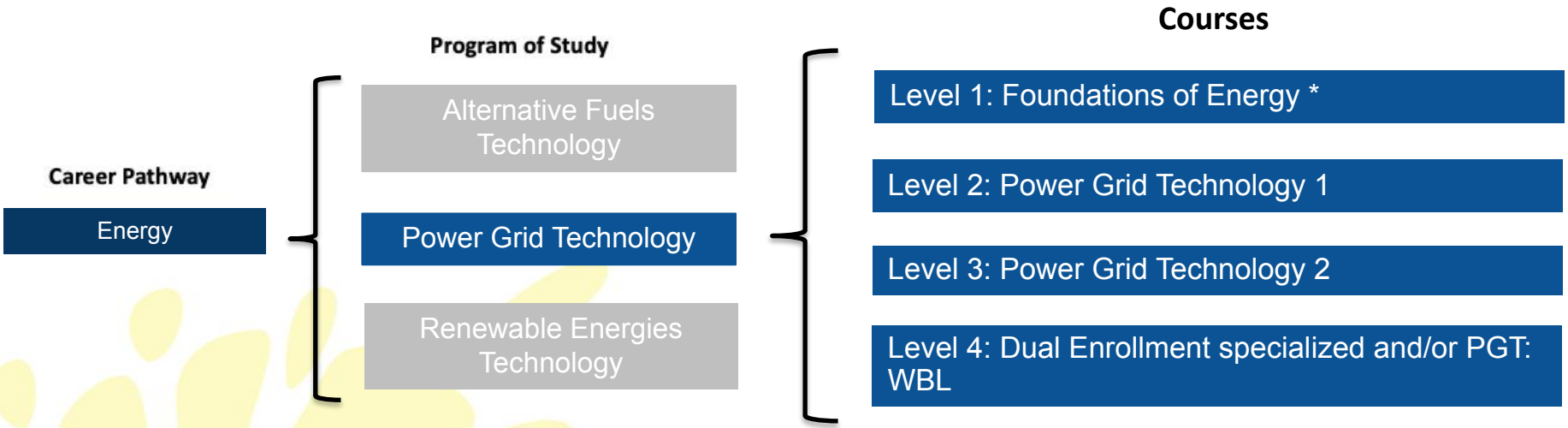


Energy Course Sequences



The Alternative Fuels Technology program is designed for students interested in pursuing a career in the emerging alternative fuels industry and workforce. This includes those who are responsible for the production of alternative fuels, the distribution of alternative fuels, the production of machinery and vehicles that run on alternative fuels, or the development and deployment of alternative fueling production infrastructures. Acquired knowledge will include production workforce operations required to take alternative fuels from their raw material to the fueling station.

Energy Course Sequences



The Power Grid Technology program is designed to provide students with the knowledge and skills necessary to become entry-level or higher-level technicians in the electrical and power transmission industry. Students will acquire knowledge and skills in the areas of electrical generation, transmission, distribution, and storage. Students can also pursue advanced learning at the collegiate level in the field of engineering and technology.

Energy Course Sequences

Career Pathway

Energy

Program of Study

- Alternative Fuels Technology
- Power Grid Technology
- Sustainable (Renewable) Energies Technology

Courses

- Level 1: Foundations of Energy *
- Level 2: Sustainable Energies Technology 1
- Level 3: Sustainable Energies Technology 2
- Level 4: Sustainable Energies Technology 3 and/or RET: WBL

The Sustainable (Renewable) Energies Technology program is designed for students interested in pursuing a career in the emerging sustainable energies industry and workforce. Utilizing knowledge and skills in the sciences, students will study energy derived from replenishable sources such as the sun (solar energy), wind (wind power), rivers/waterfalls (hydroelectric power), volcanically-heated water and steam (geothermal energy), and tides (tidal power), and how they can be harnessed to generate power, including their impact on society, economics, sciences, and the environment. .

Sustainable Energy Course Descriptions

Foundations of Energy is an introductory course designed to inform students about careers in the sustainable fuels and energy specific to Hawaii. This Level 1 course serves as the foundation course for the Sustainable Energies Technology, Power Grid Technology, Alternative Fuels Technology programs of study. Upon completion of the course, a proficient student will be able to describe various sustainable energy-based occupations and outline the steps necessary to advance in specific careers, demonstrate basic knowledge of the sources and distribution of energy
Sustainable Energy Technology 1 is the second course in the Sustainable Energies Technology program of study designed to equip students with an understanding of the different components of sustainable energy and its role in sustainability. Upon completion of the course, a proficient student will have knowledge and skills in solar and wind energies.
Sustainable Energy Technology 2 is the third course in the Sustainable Energies Technology program of study designed to equip students with an understanding of the different components of sustainable energy and its role in sustainability. Upon completion of the course, a proficient student will have knowledge and skills in geothermal and hydropower energies.
Sustainable Energies Technology 3 is the fourth course in the Sustainable Energies Technology program of study designed to have students develop a project based in energy research. Students will utilize research, tools, and equipment in varying degrees of complexity. Upon completion of the course, a proficient student will have researched and designed a suggestion for a challenging problem related to energy and presented it to local professionals in the field.
Sustainable Energies Technology: WBL is the capstone course in the Sustainable Energies Technology program of study. It is intended to provide a capstone experience for students to develop further understanding of professional and ethical issues, utilize employability skills, and demonstrate mastery of academic and technical skills learned through the program of study. The work-based learning experience provides opportunities to apply and practice the knowledge and skills learned in previous courses and gives students hands-on practical experiences related to professions in sustainable energies and related fields of occupation.

Energy Pathway Advisory Councils (PACs)

- 12-member council composed of industry, secondary, and post-secondary representatives
- Provides industry-specific expertise to inform K-12 CTE programs of study and ensure linkages between industry and K-12/K-16 education
  - The following industry partners for the Energy Pathway Advisory Council are represented: Hawaii Electric Company, Hawaii Gas Company, AES Hawaii LLC, Hawaii Energy, Hawaii State Energy Office, and the UH College of Engineering
- Recommends CTE industry standards to the Superintendent for adoption/approval

NEW - Public Feedback Opportunity

Energy Sector Partnership will have 2 weeks to provide feedback on the draft standards (February 7 - 21, 2024)

- Alternative Fuels Technology
- Power Grid Technology
- Sustainable Energies Technology

Timeline

- **February**
  Collect feedback
- **March - April 2024**
  CTE to re-engage with PACs
- **May 2024**
  CTE to finalize all standards documents
- **June 2024**
  Recommendations submitted to Superintendent

Contact Information:

Troy Sueoka, Educational Specialist
Career and Technical Education Program
troy.sueoka@k12.hi.us

Student Preparation & Pre-Apprenticeships: Interim Credential Program

Mimi Sroat

IBEW 1186

CLEAN ENERGY SECTOR PARTNERSHIP

TERM OF APPRENTICESHIP

The Wireperson Apprenticeship Program consists of 10,000 hours (~5 years) of on-the-job training supplemented by 800-hours of related classroom instruction. Classroom instruction combines both book work and hands-on training. To complete the apprenticeship program, an apprentice must obtain a State of Hawaii EJ (Journeyworker Electrician) License. All apprentices will become IBEW Local Union 1186 members and must maintain their membership in good standing for the duration of the Apprenticeship Program.

As a Wireperson Electrical Apprentice, you will gain valuable work experience through on-the-job training and attend related classroom instruction in addition to getting paid while learning on the job.

The Apprenticeship Program Training office is responsible for assigning all apprentices to jobs with Signatory Contractors and maintaining program work and classroom hours.

APPRENTICE WAGES

Wages are based on a percentage of Journeyworker Rate.

1st Step	(0 – 1000 hrs)	35%
2nd Step	(1001 – 2000 hrs)	40%
3rd Step	(2001 – 3000 hrs)	45%
4th Step	(3001 – 4000 hrs)	50%
5th Step	(4001 – 5000 hrs)	55%
6th Step	(5001 – 6000 hrs)	60%
7th Step	(6001 – 7000 hrs)	65%
8th Step	(7001 – 8000 hrs)	70%
9th Step	(8001 – 9000 hrs)	75%
10th Step	(9001 – 10000 hrs)	80%
10+	(10001 – Completion)	90%

WAGE SCHEDULE

Wages listed below are per the 2021 – 2026 Collective Bargaining Agreement (CBA) and will be renegotiated in 2025.

EQUAL EMPLOYMENT OPPORTUNITY & AFFIRMATIVE ACTION

This Apprenticeship Program complies with Title 12, Chapter 31, Administrative Rules, Department of Labor and Industrial Relations, Hawaii State Plan for Equal Employment Opportunity in Apprenticeship Training.

The Joint Apprenticeship and Training Committee has also adopted an Affirmative Action Plan. They have pledged that the recruitment selection, employment and training of apprentices shall be without discrimination because of race, color, religion, national origin or sex. In order to promote equality of opportunity, the Committee pledges to take affirmative action to encourage minorities and women.

Local Union 1186, International Brotherhood of Electrical Workers, AFL-CIO

Electrical Contractors Association of Hawaii (ECAH)

And Various Signatory Electrical Contractors

HAWAII ELECTRICIANS TRAINING FUND

INTERIM CREDENTIAL PROGRAM

This partnership between the State of Hawaii Department of Education High Schools and the Hawaii Electricians Joint Apprenticeship Committee allows Advanced Placement and DIRECT ENTRY into the:

WIREPERSON ELECTRICIAN APPRENTICESHIP

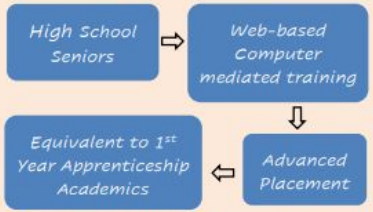
This Apprenticeship Program has been developed by the:

IBEW LOCAL UNION 1186

AND

SIGNATORY EMPLOYERS

Registered by the State of Hawaii Department of Labor and Industrial Relations Workforce Development Division



The Interim Credential Program allows high school students to take five core 1st year apprenticeship courses for advanced placement into the Hawaii Electricians Wireperson Electrician Apprenticeship Training program. Once enrolled in the Apprenticeship Program, the student can potentially complete the 5 years of classroom training in 4 years. The Interim Credential curriculum is a head start into one of the most successful electrical apprenticeship programs in North America.

Pulling feeder conductors in an electrical room.

MORE ABOUT THE INTERIM CREDENTIAL PROGRAM

The Interim Credential Program is available to certain State of Hawaii DOE High Schools and consists of 1-year of apprenticeship curriculum in a classroom setting with supplemental virtual and in-person hands-on labs. Lessons are completed using the online Learning Management System (LMS) which was developed by our National apprenticeship organization (Electrical Training Alliance). The content is sequenced in bite-size learning that utilizes animations, virtual and augmented activities, interactive videos, and many other visual communications. The five-core 1st year apprenticeship topics that are included in the Interim Credential Program are:

- Constructing Your Future
- Electrical Job Information 1
- Applied Codeology Based on the 2023 NEC
- Electrical Theory 1: Direct Current
- Construction Drawings

Students who complete the Interim Credential Program will be given a complimentary starter hand tool package which is required when assigned to an employer. These packages typically cost $800 but Castle Foundation is funding these tool packages for students who successfully complete the program. Students will also receive mentorship through the steps between program completion and direct entry into the Apprenticeship Program. Our goal is to support both the students and teachers throughout this program to facilitate a longstanding relationship between the high schools and the student who will transition to an indentured apprentice upon program completion. Our Apprenticeship Program is not just a job, our program gives participants a lifelong prosperous skill-based career.

MINIMUM REQUIREMENTS

The minimum requirements below have been modified for applicants who complete the Interim Credential Program.

- Age 18+
- High School Diploma or GED
- Show evidence of successful completion of one full-year of high school Algebra 1 or higher
- Must be capably fit to perform the duties of the trade
- Sit for the industry aptitude test (no minimum score)
- Must be a United States Citizen in order to work on U.S. Military Bases or federal facilities, if required by the contracting agency

MORE ABOUT THE APPRENTICESHIP PROGRAM

The Electrical Construction Industry is fast expanding and becoming more complex particularly with the clean energy movement throughout the United States and State of Hawaii. Our apprenticeship curriculum is continually updated to reflect the most current electrical code and new methods, technology, materials, and equipment which are constantly being introduced into this field.

Wireperson apprentices are required to obtain work process hours in the following areas and may work for a variety of electrical contractors during their apprenticeship program in order to fulfill these on-the-job training hours.

- Residential: Service/Branch Distribution/Signal
- Commercial: Conduit Installation/Metal Moldings/ Cables/Panelboards/Cable Splicing/Lay
- Industrial: Substation/Switchboard/Automated Controls
- Specialized: Fabrication/Pre-Fabrication/Custom Assembly &Wiring/Neon Signs
- General: Motor Generator & Appliance Install & Repair/Motor Generator Maintenance/Underground Duct Installation/Other

Finish work for a commercial high rise.

Besides the related apprentice classes, apprentices are required to maintain up-to-date safety certifications such as First Aid/CPR/AED, Bloodborne Pathogens/Body Mechanics, and OSHA-10 as specified by the Apprenticeship Program's Rules & Regulations. Apprentices are also required to attend all supplemental training classes that may arise as directed by their Apprenticeship Program Office.

BENEFITS

- Health & Welfare Fund (Medical/Rx/Dental/Vision)
- Pension Fund
- Annuity Fund
- National Electrical Benefit Fund
- Vacation & Holiday Fund
- Supplemental Unemployment Benefit Fund
- Training Fund

WORKING CONDITIONS

Electrical Apprentices must frequently stand for prolonged periods and sometimes work in cramped quarters. Apprentices must be able to climb and work from ladders and scaffolds of various heights, be able to crawl and work in confined spaces such as attics, manholes and crawl spaces, be able to read, hear and understand instructions and warnings. Apprentices must know how to read a blueprint, measure, cut and assemble. Apprentices also do a lot of lifting, bending, squatting, lay-outs, testing of electrical systems, installing, repairing, and often work on high-rise decks laying conduit.

Apprenticeships & Training: Good Jobs Hawaii Trainings

Nicolette van der Lee

University of Hawaii Community Colleges

CLEAN ENERGY SECTOR PARTNERSHIP

Good Jobs Challenge - Trainings Update

- **Current trainings:**
  - Renewable Energy Certificate leading to NABCEP PV Associate certification
  - Solar Safety Training (NABCEP recognizes as equivalent to OSHA 10)
  - Related Skilled Trades: CDL, Forklift, ASE, Welding, Chainsaw Safety, Carpenter Pre-Apprenticeship
- **Trainings in development:**
  - IBEW Local 1186 3rd party training with HonCC *(late Spring-Summer 2024)*
    - EVITP Certification for licensed journeyworkers
    - Exam prep for apprenticeship program
    - ESAMTAC (Energy Storage Plus)
    - EV automotive training, and DOE pathways
  - Certified Energy Manager, Certified Energy Auditor and Energy Efficiency Program online training with Association of Energy Engineers (AEE) with WinCC *(late Spring-Summer 2024)*
  - Molokai Affordable Housing Alliance Training *(late Spring 2024)*
  - IBEW Local 1260 with 3rd party trainer Lawson Safety *(late Spring-Summer 2024)*
    - Lineman pre-apprenticeship: OSHA, CDL
    - Upskilling: OSHA and hands-on training

Good Jobs Challenge - Trainings Update

- **Prospective trainings:**
  - Building Operator Certification
  - LEED Green Associate & AP Credentials
  - Construction Specification Institute - Construction Documents Technologist (CDT) Training & Exam Prep

If you have any feedback/perspectives on the value of these trainings, please add them to the chat or email Jo Ann Cantu (HSEO):
joann.nmn.cantu@hawaii.gov

Apprenticeships & Training:
DLIR Registered Apprenticeships

Edgar Fernandez &
Jaimee Tabangay

Hawaii Department of Labor and Industrial Relations

CLEAN ENERGY SECTOR PARTNERSHIP

STATE OF HAWAI'I
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DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

Registered Apprenticeship

DLIR, Workforce Development Division

Official Definition

Registered Apprenticeship (RA) is a structured occupational training program that combines **on-the-job learning** (OJL) and **related training instruction** (RTI) in which workers learn the practical and conceptual skills required for a skilled occupation, craft or trade.

Benefits/Value for Employers

- Offers a flexible training strategy that can be customized to meet the needs of any business
- Apprentices can be new hires or current employees
- RA helps businesses thrive by:
  - Developing highly-skilled, highly productive employees
  - Reducing turnover rates
  - Increasing productivity
  - Lowering the cost of recruitment
  - Increased safety in the workplace
  - Creating a more diverse workforce and new pool of workers
  - Creating Career Pathways

Key Elements of all RA Programs

Employer/Industry Lead

Programs start with employer/industry needs; employers are the foundation for the program.

1

Structured OJL & Mentorship

Provided by employer(s); competencies are attained through structured OJL, which includes mentorship from experienced mentor/journeyworker; minimum of 2,000 hours per year.

2

Related Training Instruction

Apprentices receive supplemental classroom education through RTI, which is associated with curriculum provided by a qualified and source/training provider. (144 hours per year)

3

Paid Job

Apprenticeships are jobs where apprentices earn wages during OJL. Wages progress as apprentices increase their skills and productivity.

4

Key Elements of all RA Programs

Quality & Safety

Apprentices are afforded worker protections while receiving rigorous training to equip them with the skills they need to succeed and the proper training and supervision they need to be safe.

5

Diversity

Programs are designed to reflect the communities in which they operate through strong non-discrimination, anti-harassment, and recruitment practices to ensure access, equity, and inclusion.

6

Credentials

Upon successful completion, Apprentices earn a Certificate of Completion, which is a Nationally-Recognized Credential; portable.

7




Parties of Registered Apprenticeship

Program Sponsor

- Means any person, association, committee, or organization operating an apprenticeship program and in whose name the program is (or is to be) registered or approved.
- Can be the employer (of the apprentice) or another entity, e.g. intermediary such as Community College
- Responsible for administering the program (includes doing paperwork and data entry)
- The type of program can be individual joint, individual non-joint, group joint, or non-group joint

Employer(s)

- Often also the program sponsor
- If not the sponsor, signs as participating employer
- Hires and employs the apprentice.
- Provides the on-the-job learning.
- Can be a single employer, group or association of employers.

Training Provider

- Provides the related training instruction component of the program.
- Can be the sponsor, employer, community college, or other recognized training/education entity.
- The sponsor or employer who will serve as training provider must have training facilities and qualified instructors to provide and deliver the related instruction.

Workforce System

- Multiple opportunities for the workforce system to partner with programs – both before and after an individual becomes an apprentices.
- Partner agencies such as American Job Centers offers support services to qualified apprentices.

AmericanJobCenter® HAWAII

Hawaii State Apprenticeship Agency

- DLIR is the State Apprenticeship Agency (SAA) that is recognized by the USDOL Office of Apprenticeship to administer the apprenticeship program for Federal purposes.
- Responsible and accountable for apprenticeship within the State.
- Approves apprenticeship programs.

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Registration Agency

- **Workforce Development Division (WDD) –** Division in DLIR that administers and oversees the apprenticeship program in the State.
- Entity that is responsible for registering Registered Apprenticeship Programs
- Registration agency can be the USDOL Office of Apprenticeship (OA) or State Apprenticeship Agency (SAA).

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State Apprenticeship Council (SAC)

- An advisory board to the Department of Labor and Industrial Relations Director.
- Meets quarterly to discuss issues pertaining to Registered Apprenticeship for Hawaii.
- Provides recommendations to the Director, who then makes the final decision.
- Composed of equal number of members who represent the Employer and the Employee sectors of Registered Apprenticeship.

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Establishing a RA Program

Requirements

- **Standards of Apprenticeship**
  - A written plan outlining the terms and conditions of employment, training, and supervision of one or more apprentices and subscribed by the sponsor who has undertaken to carry out the apprentice training program. Standards must conform with State and Federal laws and rules on Apprenticeship.

- **Sustainability Plan**
  - Outlines activities and strategies that will ensure continuity of the program after it is approved, OR if the program is supported/subsidized by a grant, how the program will be sustained after the grant ends.

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Step 1

Procedures

- **PROPOSAL:**
  - Interested party(ies) contact the Department of Labor and Industrial Relations (DLIR), Workforce Development Division (WDD) to initiate the registration process. WDD staff provides a brief overview of apprenticeship, including next steps, if the party decides to pursue developing a program.
  - WDD staff provides the boilerplates (Standards of Apprenticeship and Course Curriculum Outline) that will be used to develop the proposed apprenticeship program.

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Step 2

Procedures

- **PROPOSALS TO DLIR WDD:**
  - DRAFT of the Standards of Apprenticeship and course curriculum outline to WDD for review for completeness and conformity with Federal and State Regulations and Rules.
  - The course curriculum is transmitted to the appropriate Community College of the University of Hawaii System based on expertise of the program/occupation for review and recommendation.
  - The review process may entail several drafts before the standards are finalized and presented to the SAC.

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Step 3

Procedures

- **PROPOSALS TO SAC:**
  - The State Apprenticeship Council reviews the proposed new RA program during its quarterly meetings.
  - Based on the review, the Council decides and makes its recommendation to the DLIR Director.

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Step 4

Procedures

- **DECISION:**
  - SAC's recommendations and proposals are presented to the DLIR Director for a decision.
  - If the Director approves the program, he/she signs the Standards of Apprenticeship and a copy is transmitted to the Program Sponsor.
  - Any proposals that are not approved or deferred will be provided with the reason for the rejection or decrement along with next steps.

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Step 5

Procedures

- **REGISTERED APPRENTICESHIP PROGRAM:**
  - The approved Standards of Apprenticeship constitute the registration of the program with DLIR as State Apprenticeship Agency in Hawaii.
  - New apprenticeship program is also entered in RAPIDS (Registered Apprenticeship Partners Information Data System) which is the Federal electronic data base of registered apprenticeship programs and apprentices nationwide.
  - The sponsor and/or participating employers of the apprenticeship program can proceed with the recruitment, hiring, and training of apprentices.

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MAHALO

Questions?

Department of Labor and Industrial Relations,
Workforce Development Division

(808) 586-8877

DLIR.Workforce.Develop@Hawaii.gov

Poll:
Next Phase of Training

Jo Ann Cantu

HSEO

CLEAN ENERGY SECTOR PARTNERSHIP

Poll: Next Phase of Training

- Clean energy trainings that are currently available / in development through Good Jobs Hawaii were identified based on labor market data and employer feedback on in-demand jobs

- **Goal of this poll is to identify other in-demand clean energy jobs to inform the next phase of trainings that could potentially be offered through Good Jobs Hawaii**

- Note: Jobs listed in the poll do *not* yet have a specialized training available/in development through Good Jobs HI

Poll

Select your top 3 highest need entry-level jobs:

- Solar Heating Technicians
- Machinists
- Agronomists
- Wind Installation Technicians
- Project Managers
- Pipefitters
- Environmental Health/Safety Specialists
- Controls Technicians and Installers
- Power Plant Operators
- Ocean/Maritime Engineers
- Aquaculture Technicians
- Building Operators
- Green Building/Landscaping Technicians
- Construction Documents Technologists
- Other:

Breakouts:
Priority Workgroups

Cam Black

HSEO

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Breakout Groups

Career Awareness
Facilitators: Duckie Irwin, Makaha Learning Center
& Parker Kushima, HSEO

Student Preparation & Pre-Apprenticeships
Facilitators: Robert Aquino, IBEW 1186
& Cam Black, HSEO

Apprenticeships & Training
Facilitators: Jenny Tanaka, Hawaii Gas
& Jo Ann Cantu, HSEO

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Breakout Discussions:

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Career Awareness

- What initiatives are already occurring that this workgroup could leverage and support?
- What initiatives could this workgroup champion to make an impact in these areas?
- Identify immediate and long-term projects

Student Preparation & Pre-Apprenticeships

- What initiatives are already occurring that this workgroup could leverage and support?
- What initiatives could this workgroup champion to make an impact in these areas?
- Identify immediate and long-term projects

Apprenticeships & Training

- Are there any new apprenticeship programs that should be developed?
- What other trainings should we prioritize for Good Jobs Hawaii based on employment demand?

Report Back

3 minutes per group

CLEAN ENERGY SECTOR PARTNERSHIP

Notes: Career Awareness

Discuss:

1. What initiatives are already occurring that this workgroup could leverage and support?

2. What initiatives could this workgroup champion to make an impact in these areas?

3. Identify immediate and long-term projects

1. **Initiatives already occurring:**
   a. Career awareness workgroup is a common practice across other Sector Partnerships
   b. Hawaii P20 currently creating alignment maps. Clean energy alignment map is unclear due to knowledge on entry-level roles
   c. 3 schools currently piloting Renewable Energy Program of Study in Energy Pathway **(Campbell, Kapolei, Kealakehe)**
   d. AES supporting career fairs, guest speakers, virtual tours, etc.
   e. HSEO had WBL support for Kealakehe HS
2. **Initiatives to Champion:**
   a. Think and bring awareness to additional pathways in energy and how to support the standing of those (Alternative Fuels and Power Grid)
3. **Identify immediate and long-term projects:**
   a. **What support do the schools need for high school educator technical and professional development (ask the schools)**
   b. **Clean energy SP to clarify pathways to careers through employment**
      i. **Ex. Entry-level role leads to…**
      ii. **Defining technical and transferable skills to roles in Clean Energy**

Notes: Student Prep & Pre-Apprenticeships

CLEAN ENERGY SECTOR PARTNERSHIP

Discuss:

1. What initiatives are already occurring that this workgroup could leverage and support?

2. What initiatives could this workgroup champion to make an impact in these areas?

3. Identify immediate and long-term projects

Reviewed IBEW Hawaii Electricians Diagram

What are some thoughts from other sectors?

- Connecting rural communities to funding - how can funds provide multiple benefits?
- Review funding level regulations
- Funding for cultural groups
- Attracting students - how can we use CTE to attract?
- Review entry level requirements and regulations - are they appropriate?
- Instructors - need engagement from industry
- Safety for climate smart tehs / batteries / hydrogen - safety / comfort is a priority - funding is representative of safety first (OSHA-10 certs)
- Strong engagement from industry for instructors and DOE schools - ID trainers and instructors - industrial arts curricula?
- Skill-related equipment for labs
- OTJ visits

Notes: Apprenticeships & Training

Discuss:

1. Are there any new apprenticeship programs that should be developed?

2. What other trainings should we prioritize for Good Jobs Hawaii based on employment demand?

1.Aligning standards to allow entry into registered apprenticeship - had to review standards and rules to ensure 1. Are there any new apprenticeship programs that should be developed?

- Landscape technician apprenticeship - more defined skills needed and wage increase milestones (currently funding Landscape Tech cert and Arborist cert)
  - Some existing programs to look at “Landscape Irrigation Apprenticeship”
- Auto Mechanics - Napa Auto Parts in interested in developing this program
  - Is there an opportunity/interest to do collision certifications?

2. What other trainings should we prioritize for Good Jobs Hawaii based on employment demand?

- Operations: Battery Energy Storage Systems - potential for certification programs (could be grow into an apprenticeship program)
- Technicians to prepare, install and maintain electric vehicle charging stations
- NDPTC interested in climate readiness and preparedness training and certification process

Next Steps & Key Dates

Cam Black

HSEO

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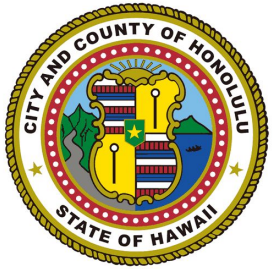
Next Steps

- **Employers:**
  - Sign Good Jobs Hawaii employer pledge
  - Complete intake form if ready to hire a Good Jobs Hawaii graduate
- **All:**
  - Sign up for a priority workgroup(s) - link in chat
  - Participate in upcoming workgroup meetings (March-April)

May 2024: Full Partnership Meeting #3 (Date TBA)

CLEAN ENERGY SECTOR PARTNERSHIP

Mahalo to our Supporters!



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