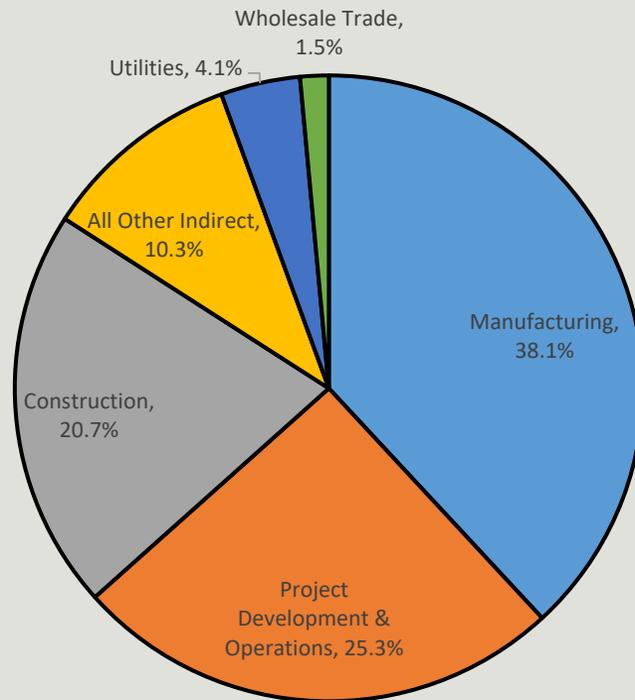


DOCKETED

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| Docket Number: | 21-IEPR-06 |
| Project Title: | Building Decarbonization and Energy Efficiency |
| TN #: | 238791 |
| Document Title: | Presentation - Overall Projected Clean Energy Job Creation |
| Description: | S3.7B_Philip Jordan_BW Research |
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Overall Projected Clean Energy Job Creation

Figure 1. Average Distribution of Job Creation by Industry Across Both Scenarios



- Figure 1 shows the average distribution of job creation by industry across both scenarios.
- Manufacturing, Project Development & Operations, and Construction are the industries projected to see the largest job growth.

California Industry Employment

Figure 2. California Industry Employment (in Thousands)

| Industry | Feb-20 Employment | May-21 Employment | Change in Employment | % Change in Employment |
|---|----------------------|----------------------|-------------------------|---------------------------|
| Leisure and Hospitality | 2,058.2 | 1,540.7 | 517.5 | 25.1% |
| Other Services Professional & Business Services | 579.5 | 469.3 | 110.2 | 19.0% |
| Education & Health Services | 2,771.3 | 2,669.7 | 101.6 | 3.7% |
| Manufacturing | 2,862.5 | 2,779.0 | 83.5 | 2.9% |
| Information | 1,327.8 | 1,256.1 | 71.7 | 5.4% |
| Construction | 581.1 | 538.5 | 42.6 | 7.3% |
| Wholesale Trade | 913.3 | 882.5 | 30.8 | 3.4% |
| | 686.3 | 647.5 | 38.8 | 5.7% |

- Figure 2 shows how COVID-19 has affected certain industries.
 - Leisure and Hospitality, Other Services, and Professional and Business Services are three industries that were heavily effected.
 - These industries contrast with the overall projected clean energy creation.

Source: BLS State and Area Employment, Hours, and Earnings

California's Unemployment Demographics

Figure 3. California Unemployment by Race/Ethnicity and Overall

State unemployment rates, by race/ethnicity and overall, 2020Q4

| State | All | White | Black | Hispanic | AAPI |
|------------|-------|-------|--------|----------|-------|
| California | 8.70% | 7.30% | 11.50% | 10.00% | 8.10% |

State unemployment rates, by race/ethnicity and overall, 2019Q4

| State | All | White | Black | Hispanic | AAPI |
|------------|-------|-------|-------|----------|-------|
| California | 3.90% | 3.20% | 5.20% | 4.30% | 3.50% |

• Between 2019 Q4, and 2020 Q4

- Unemployment increased by 4.8%
- White Unemployment increased 4.1%
- Black unemployment increased 6.3%
- Hispanic unemployment increased 5.7%
- AAPI unemployment increased 4.6%

Note: AAPI stands for Asian American/Pacific Islander. The map reports unemployment rates only for state subgroups with sample sizes large enough to create accurate estimates.

Source: EPI analysis of Bureau of Labor Statistics Local Area Unemployment Statistics (LAUS) data and Current Population Survey (CPS) data

Skills – Heat Pump Install

Fujitsu Training Academies offer training and certifications for professional HVAC installers, technicians, and contractors on the design, installation, start-up, commissioning and troubleshooting of Airstage VRF, Heat Pump and Heat Recovery systems.

- Attendees must complete a 1-day RAIT*- Regional Airstage Installation Training if they wish to complete other certifications and or trainings.
- Once the 1-day RAIT training is completed, Fujitsu has a variety of 2-day certification programs that expands knowledge on
 - Installation and Start Up- Required for Airstage certification,
 - setup, start up and service tasks in the field
 - operation and troubleshooting of Airstage V-Series systems

For a professional HVAC technician certification on heat pump systems would take no longer than 3 days in class/training

Skills – Electric Vehicle Battery Charger Install

ChargePoint

- Offers 9 different (residential and commercial) courses to become a certified electric vehicle Charge Point installer.
 - Intended for ‘professionals’, Architectural and Specifying Engineers.
 - The estimated time for the professionals stated above, to become a certified Charge Point installer ranges from 40 to 95 minutes.

Electric Vehicle Infrastructure Training Program

- Offers a 10-day online training with a final exam in California to become electric vehicle supply equipment (EVSE) certified.
 - Must be a California State Certified General Electrician