# Energy Workers – Who are They and How Do We Get More!





MICHIGAN DEPARTMENT OF LABOR & ECONOMIC OPPORTUNITY

EMPLOYMENT & TRAINING





MICHIGAN MUNICIPAL ELECTRIC ASSOCIATION

## Who is Employment & Training?



#### **Bureau of Services for Blind**

**Persons (BSBP)** believes in the capacity of people who are blind or visually impaired to achieve employment and independence, providing training and other services that empower people to achieve their individual goals.



Michigan Rehabilitation Services (MRS) provides specialized employment and education-related services and training to assist teens and adults with disabilities in becoming employed, advancing in, or retaining employment.

#### WORKFORCE DEVELOPMENT

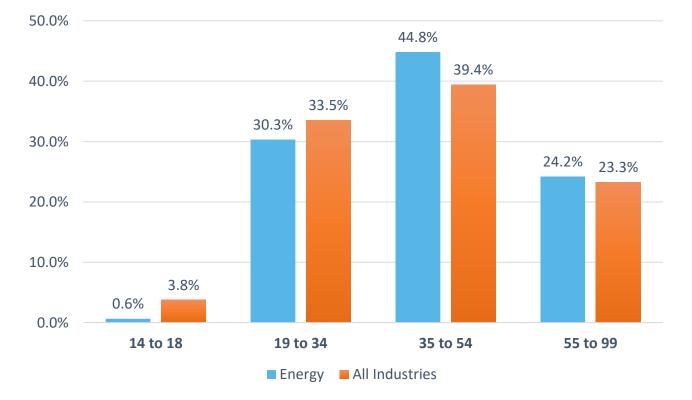
#### Workforce Development (WD)

supports a demand driven workforce system, assists the structurally unemployed with s financial independence, advocates for the integration of workforce development into the K-12 school system, and supports the alignment of workforce development with economic development efforts.

## Energy Workers -What the Data Says

- Energy has a slightly lower share of those age 19 to 34 compared to all industry sectors.
- Those age 35 to 54 make up the largest share of employment and is 5 percentage points greater than all industry sectors.
- Younger industries tend to have lower education requirements such as Accommodation and food services, Arts, entertainment, and recreation, and Retail trade.

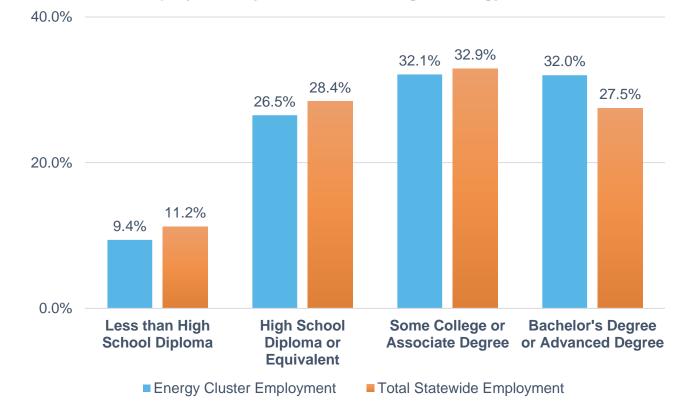
#### Share of Michigan Employment by Age



Source: Third Quarter 2021 Longitudinal Employer-Household Dynamics program, U.S. Census Bureau

## **Education**

- Around 36 percent of
  Energy cluster employment
  has a high school diploma or
  equivalent or less. This is
  compared to nearly 40
  percent statewide.
- A greater share of workers in the Energy cluster have a bachelor's degree or higher relative to statewide employment.



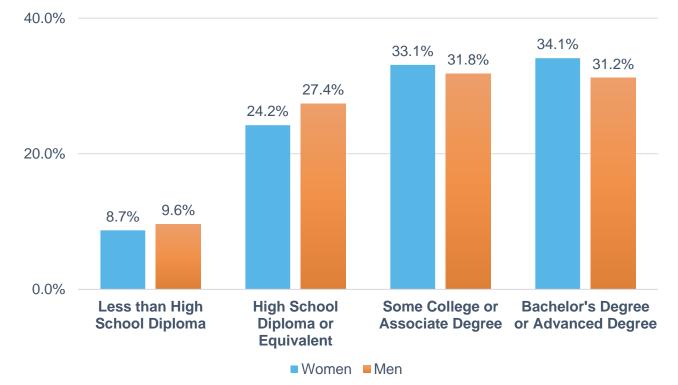
#### Employment by Education, Michigan Energy Cluster

Source: Third Quarter 2021 Longitudinal Employer-Household Dynamics program, U.S. Census Bureau

## Education and Gender

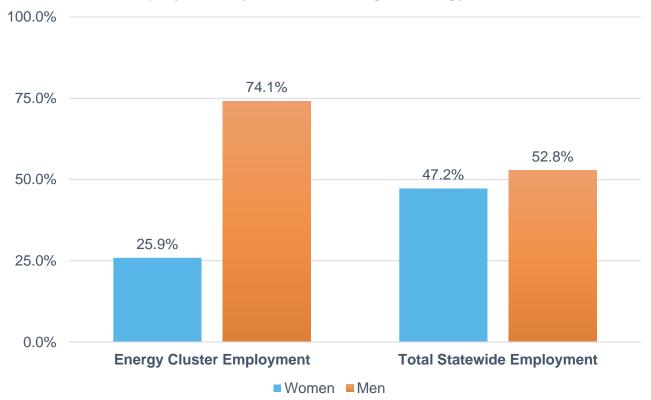
Women employed in
 Energy have slightly
 higher levels of
 postsecondary
 educational attainment
 compared to men.

#### Employment by Education and Gender, Michigan Energy Cluster



## Gender

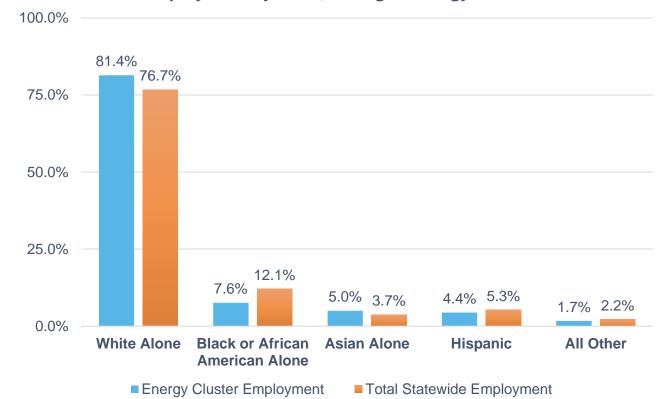
- Men account for a much larger share of Energy cluster employment relative to their statewide share of employment.
- Gender breakdown is similar to other heavily male industry clusters such as Construction and Manufacturing.



Employment by Gender, Michigan Energy Cluster

### Race

- White and Asian workers are overrepresented in Energy cluster employment.
- Black workers account for 12.1% of total employment but only 7.6% of Energy employment.



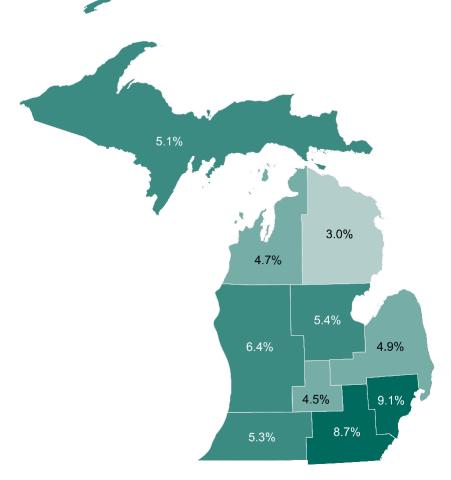
#### **Employment by Race, Michigan Energy Cluster**

Source: Third Quarter 2021 Longitudinal Employer-Household Dynamics program, U.S. Census Bureau

## Energy Employment by Region

- Energy makes up at least 5% of total employment in most regions.
- Energy employment accounts for a greater share of total employment in more populous regions of the state.

Energy Cluster's Share of Total Employment by Prosperity Region

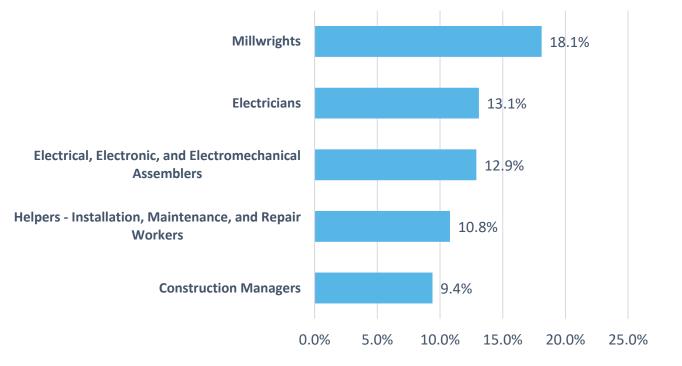


Third Quarter 2021 Longitudinal Employer-Household Dynamics program, U.S. Census Bureau

## Top Growth Occupations

- Aside from *Construction managers*, four of the top five projected growth occupations are attainable with a high school diploma and on-the-job training or an apprenticeship.
- This is compared to the projected statewide growth rate of nearly 9 percent.

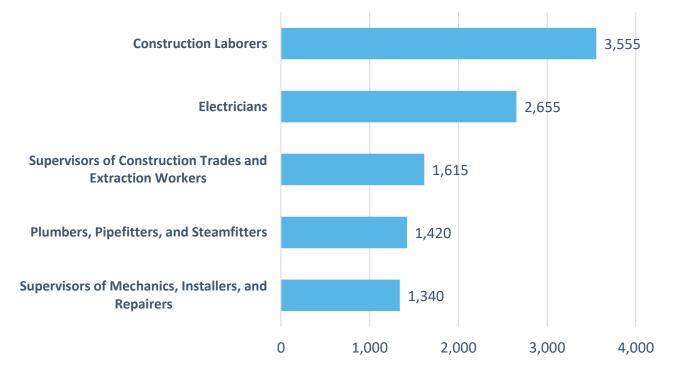
#### Michigan Energy Cluster Occupations with the Highest Projected Growth Through 2030



## Top Annual Openings by Occupation

- These occupations are all attainable with a high school diploma and training or an apprenticeship.
- The median wages among these occupations are substantially higher than the statewide median wage of \$21.88, aside from *Construction laborers*.

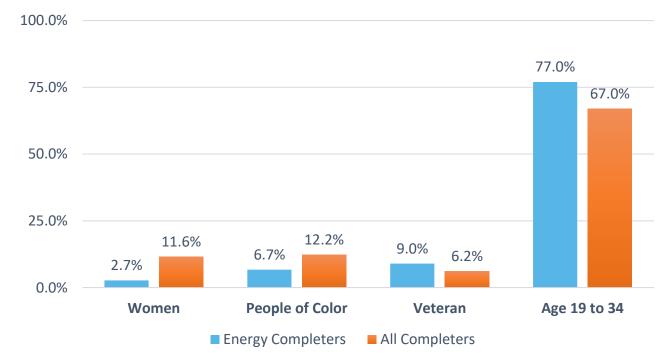
#### Michigan Energy Cluster Occupations with the Most Projected Annual Openings Through 2030



## Demographics of Energy Apprentices

- The share of women apprentices in the Energy cluster is nearly 9 percentage points less than what is seen among all apprentices.
- People of color are also underrepresented.
- Those age 19 to 34 have a share 10 percentage points greater than what is seen statewide.

#### Share of Active Registered Apprentices by Demographic

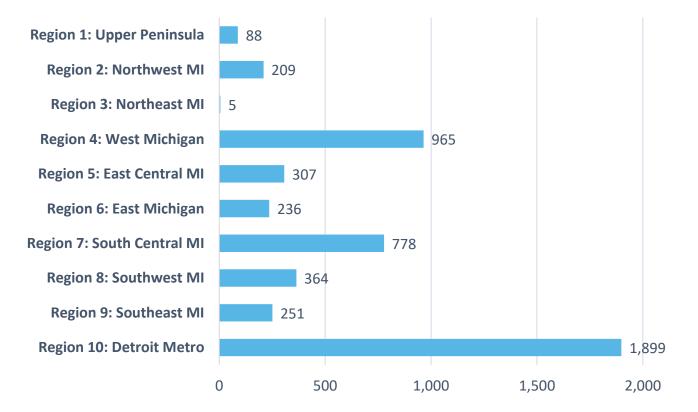


Source: Registered Apprenticeship Partners Information Management Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

## There Were 5,100 Active Energy Apprentices

- The Detroit Metro region was home to 37 percent of Energy apprentices.
- West Michigan had the second highest share at 19 percent.
- Location of registered apprentices is determined by program location.

#### **2021** Active Energy Registered Apprentices by Region

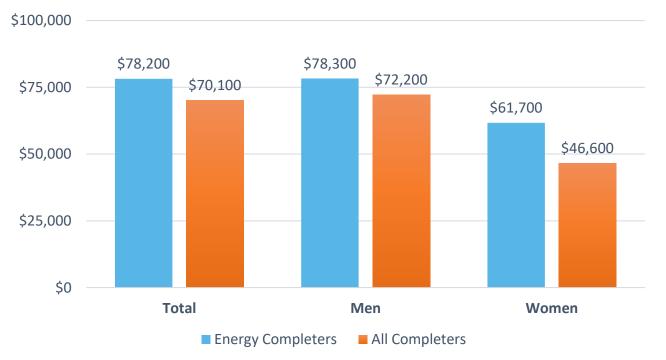


Source: Registered Apprenticeship Partners Information Management Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

## Energy Completers Face Favorable Outcomes

- Energy registered apprenticeship completers have a median oneyear-after wage \$8,000 more than all completers making it one of the higher paying sectors.
- The median one-year-after wage for women is significantly higher than what is seen among all registered apprenticeship completers.

#### Median One-Year-After Earnings of Registered Apprenticeship Completers

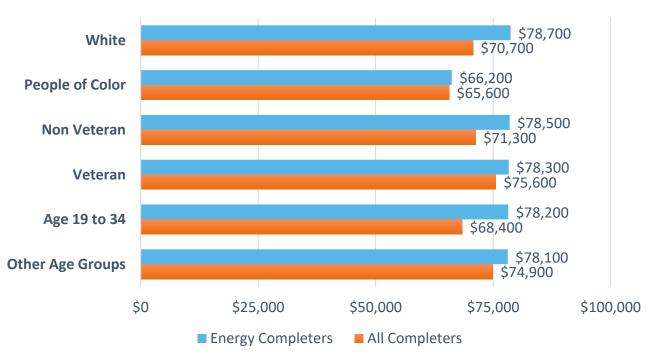


Source: Registered Apprenticeship Partners Information Management Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor; Michigan Department of Labor and Economic Opportunity; 2021 Occupational Employment and Wage Statistics (OEWS), Bureau of Labor Market Information and Strategic Initiatives, Michigan Department of Technology, Management & Budget

## Energy Completers Face Favorable Outcomes

- Other demographic groups within energy also have a higher median one-year-after wage than all completers in Michigan.
- Those who are white have a median one-year after wage \$12,500 more than people of color.

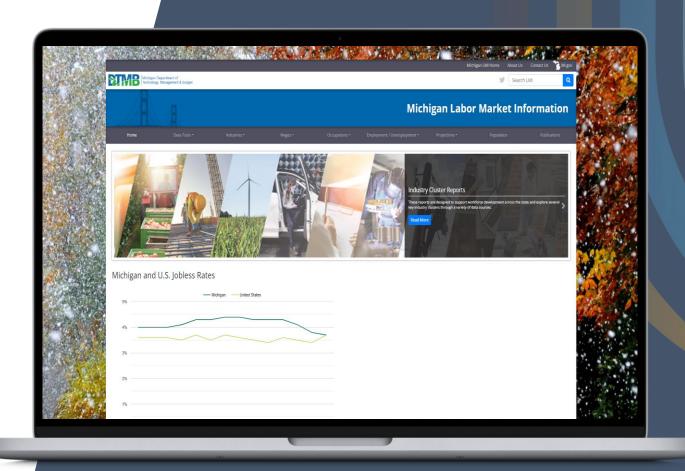
#### Median One-Year-After Earnings of Registered Apprenticeship Completers



Source: Registered Apprenticeship Partners Information Management Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor; Michigan Department of Labor and Economic Opportunity; 2021 Occupational Employment and Wage Statistics (OEWS), Bureau of Labor Market Information and Strategic Initiatives, Michigan Department of Technology, Management & Budget

## Energy Cluster Report

- The Energy cluster report is a comprehensive analysis of labor market information relating to the cluster.
- Access by going to milmi.org and using one of two options:
  - Use the banner on the homepage.
  - Click on Publications and then Research.



## David Gard, Executive Director Michigan Energy Efficiency Contractors Association (MEECA)



# Katie Abraham, Executive Director Michigan Municipal Electric Association (MMEA)



MICHIGAN MUNICIPAL ELECTRIC ASSOCIATION