

EXECUTIVE SUMMARY

Advancing inclusion through

CLEAN ENERGY JOBS

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Executive summary

The transition to a clean energy economy continues. Motivated by mounting scientific evidence, shifting market forces, and in some cases policy, U.S. industries have responded by installing more zero-carbon energy sources, developing more energy-efficient products, and adopting more environmentally-sensitive standards. More recently debates have broken out in Congress over the need for an ambitious Green New Deal centered on clean energy economy employment. As a result, shifts in “green jobs,” carbon emissions, electricity consumption, and resilience to climate shocks have become some of the highest-profile, most-debated trends of the decade.

While much has been written about all of those topics, considerably less attention has been paid to how all this intersects with the workforce. Over the years, assessments of the “clean” or “green” economy have often focused on “sizing” the sector by counting associated jobs under various clean energy activities. These counts are vital, confirming the extent of the country’s energy evolution. Yet they tell us little about the nature of work and the occupations necessary to deliver a functional clean energy economy moving forward.

Focused squarely on the workforce side of the clean energy transition, this analysis intends to help energy-sector professionals, state and local policymakers, regional education and training-sector leaders, and community organizations get a clearer look at the nature, needs, and opportunities associated with the future clean energy workforce. In particular, this analysis aims to explore the extent to which such occupations will offer inclusive pathways to economic opportunity.

Using federal datasets and industrial classifications from prior clean energy economy research, this report finds that:

- ▶ **The transition to the clean energy economy will primarily involve 320 unique occupations spread across three major industrial sectors:** *clean energy production, energy efficiency, and environmental management.* These occupations represent a range of workplace responsibilities, from jobs unique to the energy sector to support services found throughout the broader economy.



- ▶ **Workers in clean energy earn higher and more equitable wages when compared to all workers nationally.** Mean hourly wages exceed national averages by 8 to 19 percent. Clean energy economy wages are also more equitable; workers at lower ends of the income spectrum can earn \$5 to \$10 more per hour than other jobs.
- ▶ **Even when they have higher pay, many occupations within the clean energy economy tend to have lower educational requirements.** This is especially true within the *clean energy production* and *energy efficiency* sectors, which include sizable occupations like electricians, carpenters, and plumbers. Roughly 50 percent of workers attain no more than a high school diploma yet earn higher wages than similarly-educated peers in other industries.
- ▶ **Occupations within the *clean energy production* and *energy efficiency* sectors tend to require greater scientific knowledge and technical skills than the average American job.** Conversely, knowledge and skill requirements in *environmental management* occupations trend towards national averages.
- ▶ **The clean energy economy workforce is older, dominated by male workers, and lacks racial diversity when compared to all occupations nationally.** Fewer than 20 percent of workers in the *clean energy production* and *energy efficiency* sectors are women, while black workers fill less than ten percent of these sector's jobs.

These results confirm the transition to a clean energy economy could help address economic inclusion challenges from the national to the local level. However, the current roster of workers in related occupations is far from inclusive—suggesting the existence of distinct barriers to access that require additional attention and action.

A blue-tinted photograph of a wind farm. In the foreground, two workers wearing hard hats and safety gear are standing on a field. In the background, several large white wind turbines are visible against a clear blue sky. The overall scene is dimly lit, suggesting dusk or dawn.

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