Clean Energy Workforce Report Summary

BW Research, a leading economic consultancy that specializes in modeling for the energy sector, and the American Clean Power Association jointly released a study today analyzing the existing clean energy workforce and scenarios for growth under different levels of deployment for clean energy. The key findings from the study are detailed below, with the full report available at www.cleanpower.org.

The clean energy industry enables good-paying, union jobs

There are already more than 415,000 Americans across all 50 states that proudly make up the wind, solar, and energy storage workforce. These careers are some of the fastest growing occupations in the country – wind technicians are the country’s #1 fastest growing role, and solar installers are #3. Clean energy workers make 30% more than the national median wage, ensuring that they have access to good paying jobs that support them and their families. The clean energy workforce is highly unionized, with union coverage rates just above 10% compared to the average national private-sector union coverage rate of 7.7%. America’s clean energy companies are proud of the good-paying, fast growing, and heavily unionized careers that our sector has already built and support policies that will broaden these careers to many more US workers.

Accelerating the growth of clean energy is the best strategy to benefit American workers

The Biden Administration and Congress have proposed policies that could enable the US to reach 50%-70% clean energy generation by 2030. American workers would benefit greatly from this increased deployment of solar, wind, and energy storage. These policies would create an additional 500,000 – 600,000 jobs across several occupations – especially construction, manufacturing, and operations and maintenance roles. The majority of these jobs pay wages above the national average, and include careers like mechanics, electrical engineers, and civil engineers which can earn up to 47% more than the average American. Many of the jobs created by these policies will be concentrated in heavily unionized sectors, furthering cementing clean energy as a leader in this country for a unionized workforce.

This job growth will outpace labor supply; requiring an “all of the above” approach to putting Americans to work

The pace of this economic opportunity is not without its challenges – labor supply projections show there would be material shortages in the workers needed to meet all of the newly created jobs from increasing clean energy to 50%-70% of generation by 2030. The country will need over 40,000 electricians, 9,000 welders, 7,000 wind technicians, and a host of other workers above-and-beyond labor projections. To meet this level of demand, the country needs an all hands on deck approach to expand the talent pipeline – training programs, public-private partnerships, community college and vocational programs, and partnership with labor unions and non-profits.

About the Study

The underlying modeling was prepared by BW Research using the NREL JEDI models for offshore and onshore wind, and an IMPLAN-by-parts analysis mapped against NREL research papers for solar and energy storage. The analysis relied on conservative domestic content estimates. The study also leveraged data from the 2020 U.S. Energy and Employment Report (USEER) and underlying data organized by NAICS codes. The complete methodology is available in the full report on www.cleanpower.org.