

Testimony on:

Building a Green Energy Workforce

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Chairman Heinrich, Vice Chairman Schweikert, and members of the committee, thank you for the privilege of appearing today to discuss issues regarding the development of a green energy workforce. I would like to make three main points:

- The notion that a unique “green energy workforce” requires a federally funded program to train workers in green energy installation is flawed, given that the skills needed to build, operate, and maintain facilities such as wind farms and solar fields are the same skills required across many other industries in the U.S. economy.
- To the extent there are firm-specific or occupation-specific skills needed for this workforce, there are adequate private-sector incentives to acquire them.
- In general, the federal government has an expensive, less-than-stellar track record in workforce development.

Let me discuss these in turn.

What Is a Green Energy Workforce?

The centerpiece of this hearing is the idea of a green energy workforce. But what is that? The design of a renewable energy site will necessitate engineers, electrical engineers, software engineers, and others. Clearing the site for a new solar farm will require backhoe operators, dump truck drivers, and the like. Erecting the panels will require cement masons, welders, crane operators, electricians, and others.

I could go on, but the basic point is simple: The skills need to contribute to a green energy footprint in the United States are largely the same skills used across the economy. As the Bureau of Labor Statistics puts it on its [“Careers in Solar Power”](#) page:

“The majority of the occupations listed here are not specific to the solar power industry—they exist in many other industries as well. Although many of these occupations require special skills unique to solar power, skills can be acquired in other industries in most cases. For many positions, experience in other industries is desired by employers in the solar power industry. For example, solar photovoltaic installers need to have specialized knowledge and training, but many installers have previous experience as roofers, electricians, or construction workers.”

There does not appear to be a unique federal role in staffing the green energy sector.

Specific Skills and the Green Workforce

As highlighted by the quote above, some workers may need to acquire firm-specific skills or occupation-specific skills to gain employment in the green energy sector. But, again, that is hardly a new phenomenon unique to green energy. Firms willingly invest in their workers as a matter of meeting production goals, while workers seek training to qualify for advancement. There is nothing about the green energy sector that is new or different in this regard.

Existing Federal Programs for Workforce Development

To the extent there is a federal role in a green energy workforce, it would appear to be the same role it has traditionally filled. Unfortunately, the track record of federal workforce development programs does not instill great confidence in meeting these needs. Rather than creating any new programs, Congress should concentrate on improving the existing efforts.

Federal training is no guarantee of labor market success; approximately [40 percent](#) of Workforce Innovation and Opportunity Act training participants earn under \$25,000 annually. A 2019 Council of Economic Advisors report indicates that a [cost-benefit analysis](#) showed that intensive services had a positive net benefit to society as a whole but that training had a negative benefit. Similarly, a 2017 Department of Labor [report](#) indicated that primary job-training programs are largely ineffective at raising earnings and are unlikely to meet the needs of job seekers or employers. The availability of federally funded training decreased earnings by \$638 in high-unemployment local areas and increased them by \$246 in low-unemployment areas, but both estimates were statistically insignificant. Finally, a consensus of studies into Adult and Dislocated Worker Programs suggests that training may have small positive effects on earnings in the adult worker program but no significant effect on earnings from dislocated worker training.

One reason may be that federal programs are not nimble enough to stay abreast of training needs, which augurs poorly for meeting new green energy needs. [I](#) concluded that federal programs “are not aligned with the future demands for skills that the economy will place on workers.” While the research indicates that current federal career and training programs effectively place participants into employment, it also reveals potential future challenges. In particular, the training programs are not training workers proportionately in the fields where there will be overall job growth in the future economy. As the economy shifts, federal job training programs could increasingly become less effective and obsolete.

Thank you and I look forward to your questions.