RESEARCH SYNOPSIS

Translating Military Skills into Energy and Infrastructure Careers

Occupational Matches, Credentials, and State Planning Guidance

Aaron Strong, Jeffrey B. Wenger

https://www.rand.org/pubs/research_reports/RRA4152-1.html

In this report, the authors examine how service members leaving the military can smoothly transition into jobs in sustainable energy and infrastructure sectors, meeting the labor needs of these growing industries and supporting those who have served. The findings show 55 different military roles align closely with 57 civilian jobs in sustainable energy and infrastructure, many of which are expected to grow rapidly and offer above-average pay.

Key Findings

- Across all four service branches (Army, Navy, Marine Corps, and Air Force), there are 255 total matches between military and civilian occupations. Specifically, 55 military occupations match to 57 unique sustainable energy and infrastructure occupations. Most of these are high-growth occupations, paying above-average wages.
- Some military occupations matched to as many as 18 sustainable energy and infrastructure occupations, others to as few as one.
- The narrow scope of matches suggests the need for targeted transition programs to help service members acquire certifications, formal education, or additional training to fully capitalize on these opportunities.
- There are a number of occupational matches for supervisory and training occupations; these occupations are better suited to senior noncommissioned officers who have demonstrated leadership and time management skills, along with the ability to communicate the essentials of the job. Technical nonsupervisory roles are better suited to those who left military service at a lower rank.
- Wages for sustainable energy and infrastructure occupations tend to be higher than the overall economy.
- Significant numbers of veterans are qualified to fill the growing demand for sustainable energy and infrastructure jobs because many of the military occupations that match the core competencies for these sectors are some of the most common occupations in the military.
- We find that sustainable energy and infrastructure occupations have economic multipliers on the order of 1.3 to 1.5, meaning that a $1 increase in output from that occupation will result in $1.30 to $1.50 in total economic output increased.

Recommendations

- Focus on high-alignment occupations. Target recruitment, training, and support initiatives toward military roles that directly match high-growth civilian occupations, such as wind turbine maintenance, solar installation, sustainable construction, and supply chain management. Use mapping tools like My Next Move for Veterans (MNMV) to identify close matches and develop pathways tailored to the unique strengths of each service branch.

- Bridge certification and training gaps. While many military-acquired skills are highly transferable, some aligned civilian jobs may require additional certifications, licenses, or formal education. Transition assistance should include information and support accessing credentialing resources, as well as partnerships with community colleges or technical schools to create streamlined programs for military veterans.

- Support transition for specialized and limited-match roles. For military personnel whose occupations have limited direct matches (e.g., intelligence analysts, military police, or hospital corpsmen), develop targeted programs that offer training in emerging areas within the sector, such as cybersecurity for renewable energy, environmental health and safety, or data management.

- Leverage economic and regional opportunities. Prioritize workforce development efforts in regions where renewable energy and infrastructure sectors are expanding and where the economic multipliers are greatest in order to maximize spillover benefits for local economies.

- Communicate economic advantages. Publicize the higher-than-average wages and long-term growth potential in energy and infrastructure occupations, as well as accessible entry-level opportunities for those without a college degree. Highlight the upward mobility afforded by technical and supervisory roles, attracting more veterans to pursue training for these pathways.

This research was funded by Veterans Power America, a program of the Common Defense Education Fund. This work was conducted by the RAND Lowy Family Middle-Class Pathways Center within RAND Education and Labor.