

May 7, 2026

The Honorable Howard Lutnick
Secretary of Commerce
U.S. Department of Commerce
1401 Constitution Avenue NW
Washington, DC 20230

RE: Recommendation from the Environmental Technologies Trade Advisory Committee on Workforce Development to Support Export of Environmental Technologies

ETTAC Recommendation 2026-9

Dear Mr. Secretary,

The Environmental Technologies Trade Advisory Committee (ETTAC) is a statutorily established committee whose purpose is to advise on the policies and procedures of the U.S. government that affect exports of U.S.-made environmental technology, goods, and services. In this capacity, the ETTAC is providing the following recommendations in support of our shared goal to strengthen America's industrial and export competitiveness while ensuring that federal investments deliver measurable value for U.S. workers, taxpayers, businesses, and communities.

As the federal government continues to support environmental technologies and domestic supply chains, pairing these investments with proven workforce standards is essential to sustaining American export competitiveness. This approach aligns directly with the President's priorities, including those outlined in Executive Order 14278, "Preparing Americans for High-Paying Skilled Trade Jobs of the Future," which sets a goal of reaching and surpassing one million new active apprentices annually.

Despite this opportunity, the industry faces persistent challenges. Formal workforce development programs tied to environmental technology sectors remain limited, and workforce gaps, particularly in skilled trades, threaten to slow deployment and project timelines. Training infrastructure does exist for other industries: Joint Apprenticeship Training Committees (JATCs) and other joint labor-management programs have long demonstrated their effectiveness in preparing a skilled, reliable workforce, to bolster export and balance trade of U.S. environmental technologies and services around the world. However, the environmental industry lacks the support needed to plan ahead. Without sustained commitment and predictable investment

signals, employers and training programs alike struggle to scale capacity, recruit talent, and align curriculum to meet emerging demands.

Strategic investment in domestic environmental technology supply chains presents an opportunity not only to secure critical infrastructure but also to rebuild the middle class through family-sustaining careers. Federal procurement and infrastructure programs are most effective when they prioritize skilled American labor, fair compensation, comprehensive benefits, and strong safety standards. Research shows that projects built with a highly trained domestic workforce consistently deliver better outcomes for owners and taxpayers alike, reinforcing the principle that quality labor is a competitive advantage, not a cost burden.

Independent research by IPA Global, based on a nationwide database of large-scale capital projects, demonstrates that projects using a collectively trained, credentialed craft workforce consistently outperform those relying on fragmented or unstructured labor sources. According to the study, these projects achieve approximately 14 percent higher labor productivity, 4 percent lower total project costs, and significantly better cost and schedule predictability, even when hourly wage rates are higher. The research also finds that projects relying on these workforce models are 40 percent less likely to experience skilled labor shortages, a critical factor in preventing cost overruns and schedule delays.¹

Workforce agreements, including Project Labor Agreements (PLAs) and neutrality agreements, establish clear expectations for work rules, safety, training, and dispute resolution, reducing disruptions and improving coordination among all parties. IPA's findings confirm that stable labor deployment and reduced workforce turnover, both core features of these frameworks, are directly linked to improved productivity and lower total project costs. Projects utilizing structured workforce agreements experience one-third less labor turnover, which IPA associates with stronger cost control and schedule reliability.

Federal agencies that fund or oversee large-scale construction and manufacturing projects, including the Departments of Transportation, Energy, and Commerce, have a meaningful opportunity to build on these findings by working in coordination with the Office of Management and Budget and the Department of Labor to ensure that workforce agreements are incorporated into project planning and grant conditions from the outset. Expanding registered apprenticeship programs on federally funded projects represents one of the most immediate and practical ways to advance that goal while delivering consistent outcomes that benefit the American people.

¹ <https://www.ipaglobal.com/wp-content/uploads/2023/02/Value-Union-Labor-Construction-Projects-IPA-Study.pdf>

Central to this effort is ensuring access to a highly skilled domestic workforce trained through established, federally registered apprenticeship systems. Joint labor-management apprenticeship programs provide rigorous classroom instruction, extensive supervised on-the-job training, and standardized competencies across crafts. IPA's research confirms that workers trained through these systems demonstrate markedly higher skill levels, and that higher craft and supervisory skill is strongly correlated with lower total project costs and improved schedule performance. For this reason, federal investments should include clear apprenticeship utilization requirements that reinforce existing training infrastructure rather than relying on newly created or untested programs. Establishing meaningful thresholds for apprentice participation, appropriate apprentice-to-journey worker ratios, and completion standards tied to registered training ensures a continuous pipeline of skilled American workers while delivering a strong return on public investment.

Broadening access to these opportunities for veterans, transitioning service members, and historically underrepresented Americans further strengthens the nation's workforce and honors our commitment to those who have served. These pathways offer enduring careers that support families, strengthen local economies, and reinforce the values of hard work and craftsmanship that have always defined American industry.

To summarize the above, the ETTAC makes the following recommendations for federal investments and federally funded projects:

- Ensure that federal workforce agreements are incorporated into project planning and grant conditions from the outset
- Expand registered apprenticeship programs on federally funded projects
- Include clear apprenticeship utilization requirements that reinforce existing training infrastructure
- Broaden access to these opportunities for Americans including veterans and transitioning service members

ETTAC looks forward to supporting the Department's efforts by helping to identify workforce gaps associated with emerging environmental technologies. Through this role, the ETTAC can advise on registered apprenticeship programs, industry partners, and other workforce stakeholders to better understand evolving skills needs and explore opportunities for alignment. ETTAC also welcomes the opportunity to partner with the Department of Commerce to leverage available resources, data, and technical assistance to help strengthen talent pipelines and support workforce readiness in these rapidly developing environmental technology sectors.

ETTAC appreciates the Department of Commerce's leadership in advancing trade, industrial and export competitiveness policies that put America first. We stand ready to collaborate with you, your team and your interagency colleagues to ensure that environmental technologies and services, supply chain resilience, and workforce development strategies are mutually reinforcing and delivering lasting benefits for American workers and the nation alike.

Sincerely,

A handwritten signature in black ink that reads "Clare Schulzki". The signature is written in a cursive, flowing style.

Clare Schulzki
ETTAC Chair

CC: Secretary Sean Duffy, U.S. Department of Transportation
Secretary Chris Wright, U.S. Department of Energy
Acting Secretary Keith E. Sonderling, U.S. Department of Labor