DRAFT RECOMMENDATION LETTER
(DELIBERATIVE, FINAL VERSION FORTHCOMING, IF APPROVED BY THE COMMITTEE)
April X, 2026

The Honorable Howard Lutnick
Secretary
U.S. Department of Commerce
1401 Constitution Ave., N.W.
Washington, DC 20230

RE: Recommendations to Strengthen the Supply Chain and Maintain Competitiveness of the U.S. Digital Infrastructure Sector

ETTAC Recommendation 2025-<#>

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 five recommendations to strengthen the supply chain and maintain competitiveness of the U.S. digital infrastructure sector, which directly supports the export of U.S. environmental technologies and strengthens U.S. economic leadership and influence abroad. These recommendations are aligned with those included in previous ETTAC recommendations on Bolstering U.S. Supplies of Critical Minerals (2025-3, July 30, 2025), Securing U.S. Leadership in Next-Generation Industrial & Resource Technologies (2025-6, December 15, 2025), and Successfully Implementing America's AI Action Plan (2025-7, December 15, 2025).

Background

Digital infrastructure refers to the technologies and systems that enable digital communication, data processing, storage, connectivity, and artificial intelligence (AI). It includes physical components such as data centers, AI data centers, fiber-optic networks, and servers, as well as virtual systems like cloud platforms, software, and cybersecurity frameworks that support digital services and operations. Domestically and internationally, digital infrastructure enables productivity, innovation, and competitiveness across nearly every industry, from finance and healthcare to manufacturing and energy.

The U.S.-based environmental services sector is foundational to the near- and long-term success of digital infrastructure. For example, the sector ensures that assets are sited, permitted, built, and operated in compliance with environmental regulations and in alignment with sustainability standards and stakeholder expectations. It helps to reduce project risks, accelerate deployment timelines, and improve long-term resilience of critical digital assets. Additionally, the sector exports environmental and governance standards, supports U.S.-based companies with sustainable infrastructure development and operations

abroad, and enables trusted digital supply chains. This sector's leadership strengthens U.S. competitiveness and advances U.S. dominance in the global economy.

Challenges and Opportunities

U.S.-based companies rely on domestic and global supply chains to build, operate, and expand digital infrastructure domestically and internationally. The rapid pace of expansion creates local and regional challenges that are not always well addressed by conventional approaches. Examples include:

- *Water and Energy Demands:* Fabricating (e.g., semiconductor manufacturing) and operating digital infrastructure (e.g., data centers and telecom networks) significantly increases demand for both water and energy, particularly for cooling and advanced manufacturing processes. In regions with constrained resources, these growing demands can compete with existing and projected needs from households, agriculture, and other industries. Incorporating water availability and energy access into early planning, siting, and design decisions is increasingly recognized as a best practice for responsible data center and digital infrastructure development[1].
- *Environmental Compliance:* Developing and operating digital infrastructure generates stormwater runoff, air emissions from primary and backup generation, chemical handling risks (e.g., refrigerants), and land use impacts. Managing these impacts requires integrated environmental management to ensure regulatory compliance and protect surrounding communities and ecosystems.
- *Upstream Impacts:* Semiconductor production, electronics manufacturing, and the mining and refining of critical minerals are water- and chemical-intensive. They create environmental impacts that extend beyond project sites and affect regional ecosystems and supply chains.
- *Resource Recovery:* Decommissioned equipment and power and cooling systems generate increasing volumes of waste. Without proper management, these waste streams can pose environmental risks. They also contain recoverable materials, including critical materials, that can be recovered and reintroduced into the supply chain.

This letter provides recommendations to support growth and expansion of digital infrastructure, with a focus on leveraging the services and capabilities of the environmental technologies sector in the U.S.

Recommendations

We recommend the following five actions:

1. **Treat water and energy as integrated, mission-essential supply chains.** Stand up a national program that assesses and evaluates water and energy availability, reliability, and resources at the regional level. Convene supply chain stakeholders to identify current bottlenecks, needs, and examples of best practices related to resource use, risk mitigation, and monitoring. Standardize

[1] Water-AI Nexus Center for Excellence. "Principles for Sustainable Water Use by Data Centers: Building More Effective Public-Private Collaboration." https://water-ai-nexus.org/insight-report/

performance targets for water use, energy use, and resource recovery that can be tracked across the full asset lifecycle and reported for the entire digital infrastructure supply chain domestically and internationally. Build reverse logistics and end-of-life accountability into procurement and operations to reduce waste, improve recovery of critical materials, and ensure verified downstream handling.

2. **Prioritize resource efficiency to lower operating costs and reduce supply risks.** Develop a federal initiative to prioritize scaling U.S. environmental technologies – for example, water reuse, water treatment, cooling optimization, metering, anomaly detection, and thermal management – that reduce water and energy demands of digital infrastructure. Link these efforts to locations domestically and internationally where water scarcity and power constraints limit expansion of digital infrastructure.
3. **Identify, promote, and support partnerships among all supply chain stakeholders.** Support research and development in operational improvements, equipment upgrades, and new technologies that reduce resource demands. Support regional partnership models among data centers, semiconductor fabs, power providers, water utilities, and equipment manufacturers. Encourage collaborative approaches to reflect local water conditions, infrastructure capacity, and community priorities. Identify, develop, and promote best practices for regional-level service agreements.
4. **Improve and incentivize resource recovery.** Build a robust reverse supply chain by scaling reuse/refurbishment and verified recycling for servers and GPUs, power electronics, batteries, and cooling equipment. Work with the industry to develop a model procurement specification and a materials and resource recovery framework domestically and in international markets with rapid data center growth.
5. **Leverage digital monitoring and AI to optimize operations.** Require baseline monitoring of resource use and leverage AI to detect anomalies and proactively identify operational risks. Standardize reporting of key metrics so performance is auditable and comparable across projects and regions. Track performance against these metrics to prioritize incentives and streamline approvals.

Conclusion

We appreciate your consideration of these recommendations to strengthen the supply chain and maintain competitiveness of the U.S. digital infrastructure sector at home and across the globe. We look forward to working with you to support their implementation and the growth of the U.S. environmental technology industry exports. We welcome the opportunity to further discuss these topics.

Sincerely,

Clare Schulzki
ETTAC Chair