ZETA | ZERO EMISSION TRANSPORTATION ASSOCIATION

October 17, 2025

U.S. Department of Commerce
Bureau of Industry and Security
Office of Strategic Industries and Economic Security
1401 Constitution Ave NW
Washington, D.C. 20230

RE: Docket No. 250924-0161
Notice of Request for Public Comments on Section 232 National Security Investigation of Imports of Robotics and Industrial Machinery
Submitted via Rulemaking Portal: http://www.regulations.gov.

The Zero Emission Transportation Association (ZETA) is an industry coalition representing approximately 50 companies spanning the domestic electric vehicle (EV) supply chain end-to-end, including raw and processed critical mineral and material producers, cell and battery manufacturers, vehicle manufacturers, charging companies and electric vehicle supply equipment (EVSE) providers, utility companies, and battery recyclers. ZETA and our member companies fully align with the Trump Administration's goal of enhancing U.S. economic and national security through policies that derisk current and future investments in domestic manufacturing and material processing. We commend the Administration for its work to secure crucial trade agreements with allied nations that incentivize the onshoring of industrial capacity.

We thank the Secretary of Commerce for the opportunity to submit comments as part of the investigation to determine the effects on national security of imports of robotics and industrial machinery, initiated under Section 232 of the Trade Expansion Act of 1962. The U.S. does not currently have viable domestic alternatives for industrial machinery; however, imports are diffuse across a number of reliable trade partners. The imposition of tariffs on imported intellectual property and highly specialized industrial machinery creates a national security risk by compromising the economic case for investing in next-generation U.S. manufacturing. We look forward to discussing these policies in future conversations with your staff. If you have any questions or concerns, please contact me at al@zeta.org.

Sincerely,

Albert Gore
Executive Director

Background

As the Administration investigates the implementation of Section 232 duty rates for certain robotics and industrial machinery, ZETA notes that our membership includes automakers and battery producers that produce the most American-made cars and employ thousands of domestic workers. ZETA members represented nearly 70 percent of announced U.S. EV battery manufacturing operations at the end of 2024–or over 300 GWh of battery production capacity.[1,2] In 2024, ZETA members sold over 695,000 American-made battery-electric vehicles in the U.S., representing approximately 53 percent of all new U.S. electric car sales last year. In September 2025 alone, North American EV sales climbed 66% to 215,000 vehicles sold.[3] ZETA members are also pioneering American industrial capacity for cathode active material and anode active material. Since 2020, ZETA members in the EV, battery, and critical mineral and materials sectors have announced over $55 billion in private sector investments that are projected to yield nearly direct 70,000 jobs in the years ahead.[4] Our companies are proud to invest in American manufacturing by opening factories across the country that create American jobs in all aspects of the EV supply chain, and onshore manufacturing processes.

Significant work remains, however, before many ZETA member facilities are able to reach full potential. Factories in Indiana, Kansas, Tennessee, Georgia, Arizona, and elsewhere are in the process of scaling. While the EV supply chain continues to distance itself from foreign entities of concern and to defend against unfair and manipulative trade practices, imports of highly specialized machinery that use proprietary intellectual property will be necessary to bring multi-billion dollar production lines into operation and thousands of U.S. jobs to fruition.

Industrial equipment and robotics are the most financially intensive components of scaling domestic advanced manufacturing capacity. According to the International Federation of Robotics (IFR), the U.S. robotic installations are heavily concentrated in the automotive sector – representing 40 percent of all installations in 2024.[5] Automakers installed 13,700 robots in the United States in 2024, an increase of around 11 percent over the previous year. Some manufacturers in the EV industry spend 40 percent or more of the total cost of standing up a new factory on robotics alone.

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[1] Jenkins, J.D., "Potential Impacts of Electric Vehicle Tax Credit Repeal on US Vehicle Market and Manufacturing." March 2025. DOI: 10.5281/zenodo.15001499

[2] The Big Green Machine: Tracking North American Clean Energy Supply Chain, database accessed 2/13/2025 https://www.the-big-green-machine.com/

[3] "Global EV Sales Hit Record 2.1 Million in September…" https://www.reuters.com/business/autos-transportation/global-ev-sales-hit-record-21-million-september-research-firm-says-2025-10-14/.

[4] Atlas Public Policy, Clean Economy Tracker. April 2025. https://cleaneconomytracker.org/about/.

[5] International Federation of Robotics. "Robot Installed in US Auto Industry Up by Double Digits." https://ifr.org/ifr-press-releases/news/robot-installations-in-us-auto-industry-up-10.7

Domestic production capacity for advanced robotics and industrial machinery remains critically limited and is not a viable alternative for advanced manufacturing projects that require company-specific IP that can only be imported. Moreover, U.S. suppliers are typically smaller firms that cannot meet large-scale project needs, which often exceed $50 million per installation. Imports from allied nations fill this gap, ensuring that U.S. manufacturers can construct and equip facilities efficiently.

U.S. imports of robotics and industrial machinery are diffuse across multiple reliable trade partners. While certain segments—such as robotics—rely more heavily on Japan and South Korea, U.S. exposure to any single concentrated foreign supply is limited. Europe, South Korea, Japan, Brazil, and Malaysia are key trade partners for industrial machinery. Globally, 70 percent of all robotics are manufactured in Canada, Japan, China, Germany, and South Korea.[6]

Manufacturers mitigate business and national security risks through service contracts, intellectual property ownership, and redundancy strategies. These practices provide effective protection against potential disruptions, whether from geopolitical tensions or natural disasters. ZETA encourages BIS to consult with individual companies to fully understand robotics and industrial machinery supply chains, the national security risk(s) that could be posed by certain imports, how best to mitigate those risks, and the current laws and regulations already in place that address the national security concerns with importing such machinery.

Existing tariffs already create barriers for U.S. manufacturers seeking to expand production. Additional Section 232 measures, and potential tariff stacking, would further increase capital costs for new facilities, extend construction timelines, and divert investment to more predictable markets overseas. These impacts would harm, not enhance, national security, by constraining domestic production of critical goods such as electric vehicles and batteries. **Tariffs on what are already the most expensive elements of scaling in the United States ultimately weaken domestic competitiveness and economic security, and undermine the Administration's efforts to expand domestic manufacturing.**

Recommendations for Expanding U.S. Capacity

To strengthen U.S. resilience without impairing industrial growth, BIS should consider the following measures:

- Invest in workforce development through modernized technical education and targeted immigration pathways for critical skills.
- Expand access to capital and tax incentives to accelerate reshoring of machinery production.

[6] Ibid.

- Establish Industrial Opportunity Zones to attract foreign direct investment from trusted partners.
- Deepen cooperation with allied nations to build a coordinated network of reliable machinery and robotics supply chains.
- Continue pursuing trade agreements with critical allied nations with industrial machinery capacity.
- Provide flexibility for companies working to deliver on commitments made under existing trade agreements. Companies investing in the U.S. using IP from allied nations must continue to be allowed to import industrial machinery.
- Exclude machinery from the scope of this investigation for companies making investments in line with the bilateral trade agreements and imports to support U.S. companies expanding their manufacturing capacity.
- Use a risk-based approach to any restrictions, narrowly applying them only where a demonstrable nexus to national security exists.

In imposing new duties on robotics and industrial machinery, the Administration should be careful and targeted, avoiding critical increases in costs and limiting supply chains without secured or existing alternatives. Reorienting supply chains is expensive and can take years. Each additional duty placed on these vital manufacturing technologies compromises the economic case for investment in America. We encourage the Trump Administration to continue securing commitments to invest in the United States through trade agreements like the U.S.-Japan Strategic Trade and Investment Agreement and with countries like Germany and Brazil. At the same time, ZETA supports fostering U.S. capacity to produce state-of-the-art robotics and machinery by allowing a domestic market to scale rapidly through non-tariff mechanisms, including capital incentives and R&D investment. A flourishing market for domestic industrial machinery and robotics can be built up over time through policies that expand U.S. manufacturing, facilitate technology transfer, and encourage foreign direct investment into the United States by companies that meet the necessary market specifications.