

ALLIANCE FOR american manufacturing

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How Trade Enforcement Strengthens American Manufacturing

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Trade policy, trade remedy laws, tariffs, and their effects on the economy are readily in the news. For policymakers encountering these issues for the first time, however, it can be difficult to understand the esoteric history of these remedies that have existed for almost a century, where their authority comes from, and what the impacts of their use have been for domestic jobs and production. This report aims to provide an overview of the U.S. trade policy and remedies, their longstanding use as tools to preserve domestic production and job security, and the urgent need for their reform in the face of evolving global practices these laws were not designed to address.

FOREWORD

When the Alliance for American Manufacturing released our first publication, *Enforcing the Rules*, in 2007, we began with a straightforward conviction: Trade only works when its rules are enforced. Nearly twenty years later, the well-being of American manufacturing and the workers and communities it sustains remains at the heart of our mission.

That history matters now. At a moment of political transition and debate over the president's trade agenda, some policymakers may be tempted to roll back enforcement measures simply because of who advanced them. That would be a serious mistake. Trade enforcement is not the province of one president or one party. It is a longstanding, bipartisan responsibility, and as *How Trade Enforcement Strengthens American Manufacturing* shows, an essential tool for American workers, manufacturers, and our economic and national security.

The case studies in this report show what these tools can accomplish when they are used effectively. Enforcement can counter unfair trade, restore fair competition, support investment, preserve critical industrial capacity, and secure good jobs for American workers.

The answer, then, is not retreating. We should strengthen and modernize our trade enforcement system for an ever-changing global economy. We know the value of making things here. Domestic production creates good jobs, anchors innovation, strengthens resilience, and equips the United States to meet both economic and national security challenges.

I'm grateful to Dr. Carolina Ferrerosa Young for her deep research and thoughtful preparation of *How Trade Enforcement Strengthens American Manufacturing*. Dr. Young served on the front lines of this conversation at the White House and while serving several U.S. Senators. Thanks also to Matthew McMullan, Scott Boos, the team at AAM, and our stakeholders for their time and expertise in bringing this report to life.

This important work is a reminder that enforcing the rules is not partisan protectionism; it is the foundation of a trading system worthy of public confidence. We urge policymakers in both parties to build on that foundation.

Scott Paul
President, Alliance for American Manufacturing

Executive Summary

Strategic tariffs and other trade enforcement measures have a lengthy track record of effectively supporting American industry. For more than a century, policymakers have recognized that the government has an obligation to ensure domestic manufacturers and workers have a level playing field with international competition, particularly when foreign producers benefit from government subsidies, dumping, market manipulation, and other advantages that do not reflect genuine market conditions. Antidumping and countervailing duty laws specifically have helped restore fair competition by offsetting unfair pricing and foreign government support. These measures do not insulate American companies from legitimate competition. Rather, they ensure that competition takes place according to fair rules.

This report explains why these tools remain essential and why they must be strengthened for the global economy as it evolves today and in the future. The first section traces the history of U.S. trade enforcement and examines the growing pressure that foreign overcapacity and unfair trade have placed on American manufacturing employment, wages, investment, and production. It then explains specific enforcement authorities, including antidumping and countervailing duties and the presidential tariff powers available under Section 232 of the Trade Expansion Act of 1962, and Sections 201 and 301 of the Trade Act of 1974. The second section presents case studies from the aluminum, solar, steel, and glass sectors, showing how trade enforcement has affected these domestic industries. The report concludes with policy recommendations for making enforcement faster, stronger, and better suited to modern trading practices.

The need for these tools and for their improvement is clear. American manufacturing workers have endured decades of pressure from import surges, global overcapacity, and state-directed industrial policies. The China trade shock was responsible for nearly 60 percent of the manufacturing jobs lost between 2001 and 2019, with job losses occurring in every state and some communities never recovering. Unfair trade also suppresses wages, discourages investment in research and advanced technology, and weakens the productive capabilities and innovation on which economic and national security depend. With a second China shock well underway, our businesses and workers operating under market conditions are still forced to compete against foreign producers supported by an ever-changing array of non-market policies.

That makes trade enforcement more vital than ever. Antidumping and countervailing duty orders offset foreign dumping and subsidies, helping manufacturers stabilize market share, sustain production, and avoid layoffs. Presidential tariff authorities provide broader and more flexible options when import surges, national security threats, or systemic unfair practices cannot be addressed adequately through product-specific cases. Their use across Democratic and Republican administrations reflects an increasingly bipartisan understanding that persistent overcapacity and non-market behavior demands a durable response.

Imports from low-wage countries tend to lower American wages for workers without a college degree – specifically, every $1,000 in imports per worker lowers wages by 0.7 percent.

The industry case studies show what effective enforcement can accomplish. In aluminum, trade measures and strategic federal investment contribute to conditions supporting the planned construction of the first new primary aluminum smelter in the United States in nearly five decades. In solar manufacturing, enforcement measures and production incentives help support generational investments in domestic facilities, technology, employment, and supply chains. In steel, recent trade actions help stabilize market conditions, support more than $22 billion in announced capital investment, and mitigate further job losses after decades of contraction. A study of the domestic glass industry likewise demonstrates how fairer market conditions and growing domestic demand can support the reopening of production lines and the rehiring of workers.

Still, the current enforcement system remains too slow and reactive. Manufacturers may have to document nearly a year of injury, spend millions of dollars pursuing a case, and then wait an average of 14 months for duties to be applied. During that time, production may be idled and workers laid off. Foreign producers can compound the damage by shifting production to third countries, superficially modifying products, transshipping goods, or otherwise evading existing measures. American workers should not have to lose their livelihoods before the government can respond.

Congress should therefore preserve existing trade remedies while making them faster, more accessible, and harder to circumvent. Enforcement agencies need stronger authority to address repeated country-hopping, cross-border subsidies, customs fraud, and tariff evasion. Policymakers should also develop prospective tools that identify and counteract unfair practices before factories close and workers are displaced. Duties collected from law-breaking foreign actors should help injured domestic producers reinvest in facilities, equipment, and employees. Strong enforcement should also be paired with durable investment policies that encourage production in strategic industries and attract high-quality investment to the United States.

The lesson is straightforward: Trade enforcement works when it is timely, credible, and durable. The United States should build on that record with a stronger system capable of defending American workers, supporting domestic investment, and preserving the industrial capacity essential to our nation's future.

Introduction

Trade remedy and enforcement tools to confront unfair trade practices by foreign producers have a history in U.S. law dating back to the early days of the Republic. Indeed, the Tariff Act of 1789, passed shortly after the Constitution was ratified, authorized the imposition of duties not only to generate revenue, but to provide limited protection for infant industries.[1]

In the 19th and 20th centuries, duties were expanded to tackle antitrust issues and market manipulation. With both the Sherman Antitrust Act of 1890 and Clayton Act of 1914, policymakers made it illegal to attempt to monopolize a market and, additionally, engage in any price discrimination practice that reduced competition. These principles were then used for the Wilson Tariff Act of 1894 and the Antidumping Act of 1916, making it illegal for foreign producers to attempt to monopolize the U.S. market or sell goods below fair market value.[2]

Congress also developed tools to address the market-distorting effects of foreign government subsidies. The first U.S. countervailing duty law was enacted in 1890, amid concerns about subsidized sugar imports from Russia, and was later expanded in 1897 and 1922, establishing a separate but complementary mechanism to combat unfair trade practices.

The Antidumping Act of 1921 created the authority to impose import duties, otherwise known as tariffs, to address the injury to American producers.[3] At their core, antidumping (AD) and countervailing duty (CVD) laws are designed to restore fair competition by counteracting foreign products that are sold below fair value or supported by government subsidies that distort the market.

From the earliest days of our nation to now – and through a series of changes in administrations, agencies of jurisdiction, and implementation in line with frameworks negotiated with the World Trade Organization (WTO) – AD/CVD laws have been a consistent part of the United States' response to unfair trade practices. There was significant use of them in the late 1930s, between the mid-1950s to mid-1960s, and again in the 1980s and 1990s, well before their current use in the 21st century.

Since the enactment of these trade remedy measures, the world has changed. In the earlier part of the 20th century, import penetration into the U.S. market was limited, as was the size of the national economy. What's more, antidumping margins in these early cases and the actual injury determinations for American companies were low. The laws were on the books and necessary for specific products, but rarely were they critical for American industry's overall competitiveness. In the 1980s, however, the need for these tools and findings in these cases shifted dramatically: Antidumping margins are now much higher, firms are filing multiple petitions, and more than half of all cases are found to have affirmative injury. Global markets have grown and so has the request for, and use of, instruments designed to address the increasing prevalence of market conditions tantamount to global production monopolies across a variety of sectors. As the size and strength of the U.S. economy increased, so has our trading partners' targeting of the U.S. market for their own competitive gain.

Unfortunately, while global markets and unfair trade practices now shift at unprecedented speeds, the agility of U.S. trade remedy and enforcement levers has not kept pace. The traditional tools that have been a feature of U.S. law for over a century are still designed to respond retroactively after the harm has occurred. As a consequence, the burden falls on American industry and workers to demonstrate the injury with multiple agencies that must investigate and adjudicate the extent of trade cheating and harm it causes. Often, that means American companies generally must spend millions of dollars to bring these cases forward, must provide evidence of almost a year of financial injury to their business (often with direct harm to their workers in the form of layoffs or other cuts), and must wait an average of 14 months for duties to be applied. Policies designed for industry generations ago focused on creating a recourse for already capitalized firms able to survive prolonged injury determinations. They were not designed to directly help dynamically responsive enterprises, low-margin sectors, serial targeting, circumvention and evasion, or accessibility for small businesses of any kind. Nor were they designed for a global marketplace in which foreign producers can shift production, sourcing, and trade routes while an enforcement action is still underway. The best way to create certainty for domestic manufacturers and workers is through modernized trade tools, more agile remedies, and consistent, well-resourced enforcement capable of responding as market conditions change.

Overcapacity

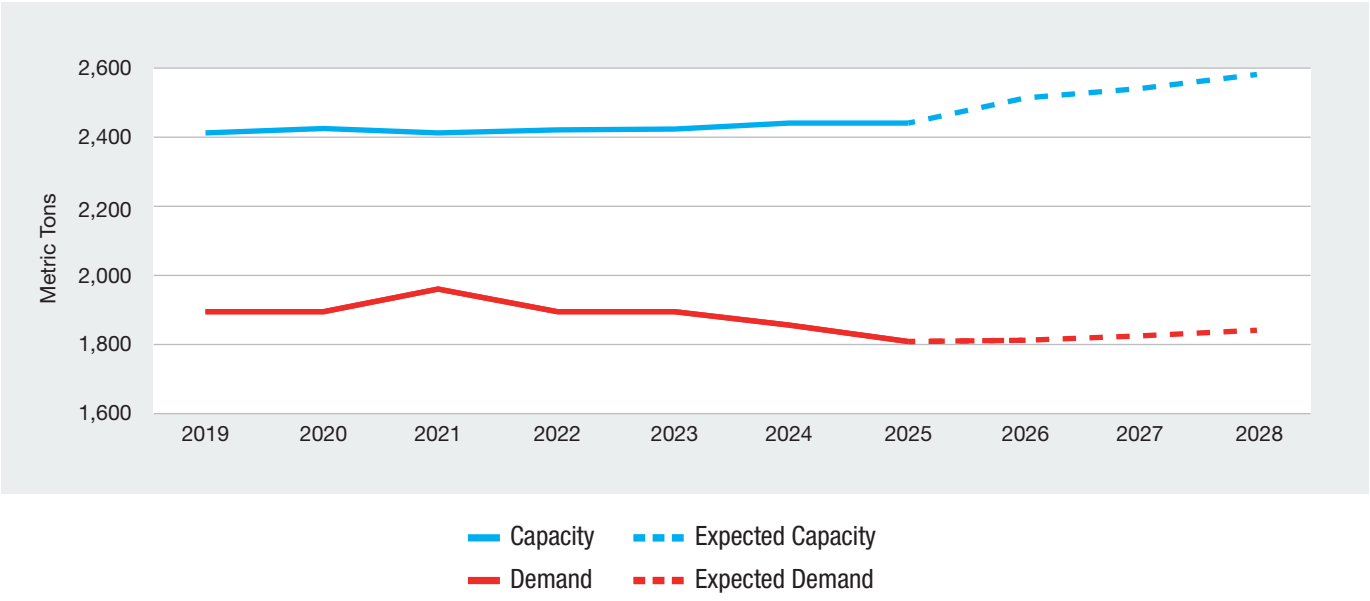
The rigidity of AD/CVD laws, as they are currently structured, is often a problem in the face of fierce and sometimes hostile modern market conditions, such as production overcapacity. Structural excess capacity driven by foreign government-directed policy results in the sustained overproduction of a given product beyond domestic and global market demand, resulting in markets being flooded with imports of excess production in a way that artificially lowers the price for that product, often below market cost. Over the past several decades, many countries and economic sectors have had to face the chronic problem of production overcapacity in the global market and its negative impacts for specific industries around the world. Unfortunately, policymakers were slow to respond to these market-distorting conditions. Previous Alliance for American Manufacturing (AAM) reports have noted that overcapacity is a feature of China's industrial policy, not a bug, with the subsidization of specific industries and their subsequent glut in the global market often imposing a loss for market-oriented competitors.[4]

Between 2004 and 2014, global steel demand increased by 43.3 percent at the same time that global steel production increased by 57 percent, with China responsible for 91 percent of the increase.

Production overcapacity affects an increasing number of sectors but is heavily concentrated in several critical industries, including steel, aluminum, chemicals, cement, copper, polysilicon, and other primary commodity inputs. Distortions in these input sectors then put increasing pressure on downstream sectors, such

DATA INSIGHTS

Global steel excess capacity projected to reach 745 million tonnes by 2028



Note: Steelmaking capacity and demand are measured in terms of crude steel. The capacity forecasts are based on announced projects underway and planned.

Source: OECD for capacity and all estimates and forecasts of capacity and demand.
Demand for 2019-2023 is based on World Steel Association data, and for 2024-2028 on OECD calculations.

as automotive, shipbuilding, crystalline silicon solar panels, and energy generation. For example, roughly between 2004 and 2014, global steel demand increased by 43.3 percent at the same time that global steel production increased by 57 percent, with China responsible for 91 percent of the increase.[5] China already accounts for over half of global steel production,[6] and that overproduction and the expansion of Chinese-owned firms in other regions of southeast Asia, the Middle East, and Africa continue to affect the global market. As a consequence of these global overcapacity issues for certain commodities, AD/CVD cases in the United States are often heavily concentrated in these same sectors: Almost 40 percent of all active AD/CVD orders in place are steel-related.[7]

While China remains the primary driver of global overcapacity in steel and many other sectors, it is not the only source of the problem, as producers in a number of countries, including close U.S. allies and partners, have also expanded capacity, provided market-distorting support, or served as conduits for excess production entering global markets.

Job Security, Investment, and Raises

Today's global overproduction problems, production monopolies, and unfair trade practices are the nightmare scenarios policymakers in the early 20th century were envisioning. They also have had foreseeable economic spillover effects for capital investment and research and development (R&D), as well as compensation and job security for American workers.

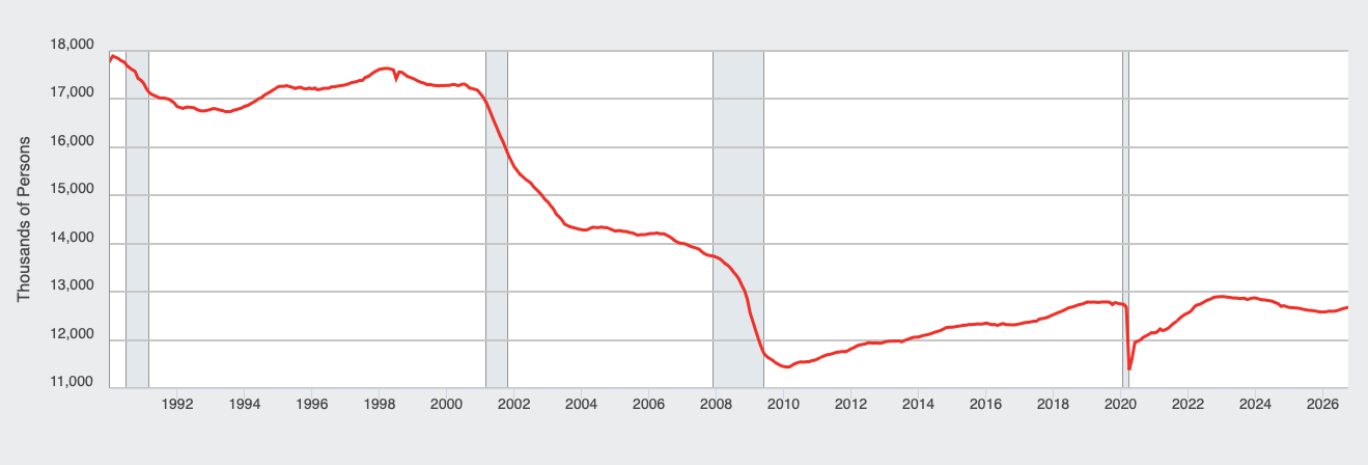
When severe levels of import penetration occur in the U.S. market, domestic production and manufacturing jobs are put at risk. The starkest example of this began after the United States extended Permanent Normal Trade Relations to China in 2000 preceding its accession to the WTO, prompting the corporate offshoring of millions of American manufacturing jobs in the two decades that followed. This phenomenon, now known as the "China trade shock,"[8] was responsible for nearly 60 percent of all manufacturing jobs lost between 2001 and 2019.[9] The ensuing layoffs converted those production workers nearly one to one into the long-term unemployed.[10] Researchers have consistently found the job loss from the China shock occurred in every state and that some communities never recovered from the economic harm.[11]

While they are major levers of U.S. trade enforcement AD/CVD laws are designed to kick in as a line of last defense for domestic companies only after the harm has been done. Because companies must show material injury or a threat of it for a set amount of time before even petitioning for relief with these cases, they often take steps to address the harm from these practices, including idling production lines and laying off workers. Over the past few decades, countless workers have been laid off in advance of companies petitioning for relief through AD/CVD cases. These workers are often told a petition for trade relief is being filed with the federal government in the hopes of ensuring the layoffs are temporary. In cases where there is an affirmative determination of injury and duties are applied, these workers are often brought back to work. As a consequence, it is fair to say there are thousands of workers in these specific industries who know what tariffs are and have tariffs to thank for regaining their livelihoods. With serial targeting by our trading partners, however, there is often a corrosive impact.

Unfair trade practices also degrade private sector investments in R&D, maintenance, and technological upgrades. Research produced by Carnegie Mellon has found that when production work is outsourced globally to a lower-wage country, the traditional economics of next-generation technology investment break down.[12] In other words, it becomes so much cheaper to continue producing the same product elsewhere in the world that there is no longer an incentive to upgrade technology to keep ahead of the competition. Similarly, in cases where there is unfair subsidization and dumping of a product, companies are left with few options other than to cut costs as much as possible and, in some cases, sacrifice the quality of the product they are already producing.

This phenomenon, now known as the "China trade shock," was responsible for nearly 60 percent of all manufacturing jobs lost between 2001 and 2019.

Employment for Manufacturing in the United States, 1990–2025



Source: U.S. Bureau of Labor Statistics via FRED®, fred.stlouisfed.org
Shaded areas indicate U.S. recessions.

In capital-intensive manufacturing industries, where maintenance of facilities and upkeep of the machinery is part of the operating costs of production, avoiding these kinds of investments and costs can steadily degrade the quality of the product and production efficiencies. This quality degradation, in turn, can affect the competitiveness of the product, creating a negative feedback loop – a slow death by a thousand cuts.

Worker compensation over time is similarly affected by unfair trade practices. Researchers have long noted that trade agreements and the subsequent globalization of production have contributed significantly to wage suppression in the United States.[13] Imports from low-wage countries tend to lower American wages for workers without a college degree – specifically, every $1,000 in imports per worker lowers wages by 0.7 percent.[14] Based on 2016 data, that translates into a reduction of $2,000 annually for a full-time worker earning the median wage. Beyond the standard relationship between imports and wage suppression, however, unfair trade practices layer additional downward pressure on wages by undercutting globally competitive and productive work. A facility could be productive and able to make competitively priced products with the actual global market value of inputs, and still be placed at a disadvantage by trade practices that make even this kind of work nonviable. As companies try to cut costs even in circumstances where the global market value of goods would not necessitate it, these trade practices drag down wages and working conditions, particularly in industrial sectors encountering global excess production.

Executive Authority for Dynamic Responsiveness

AD/CVD laws are often viewed as the last line of defense against unfair trade practices, but they are not the only tools available to tackle both unfair trade practices and the national security issues that can arise from subsidies, state direction, price controls, forced technology transfers, capacity mandates, and other non-market practices. While AD/CVD laws play a critical role in enforcing U.S. trade laws, Congress understood that certain trade and national security challenges require broader authorities and more flexible remedies than AD/CVD proceedings alone can provide. These processes include Section 232 tariffs for threats to national security; Section 301 tariffs to combat unfair trade practices directly; and Section 201 tariffs to temporarily shield a domestic industry under a surge of imports. This report will expand on the history of these authorities, and their use over time by Democratic and Republican presidents alike.

The Cost of Negligence

The increased use of trade enforcement tools today should be understood in the context of the preceding era of hyper-globalization. From the 1990s through the mid-2010s, the United States frequently underutilized available trade enforcement authorities even as excess capacity and other non-market distortions intensified. During that same period, the U.S. industrial base experienced a precipitous decline in output, employment, and production capability. For many regions of the country, including small towns, the economic anchor might have been a factory with high-paying production jobs that did not necessarily require a college degree. During the first decade of the 21st century, however, the United States lost 56,000 factories – about 15 a day[15] – along with the millions of jobs that came with them.

Domestic manufacturers and workers facing global unfair trade practices during this period confronted dramatic upheaval. One of the most acute examples of change in fortune involved companies and workers in the iron and steel industries. In the late 20th century the United States was still the primary global producer of steel. Today, China produces more steel than the rest of the world combined and more steel than the entire world did in the late 20th century.[16] In the early 1970s, members of the United Steelworkers (USW) were some of the best paid industrial workers globally.[17] Today's employment in iron and steel industries is less than half of what it was in 1987, a decline that coincided with a dramatic growth of global excess capacity, foreign subsidies, and other non-market practices that placed significant pressure on U.S. producers and workers.[18]

The impact of foreign unfair trade extends to almost every sector of industrial production where the United States was once a leading producer. In electronics, textiles and apparel, and semiconductors, the United States once led global production. Today it has replaced production capability with increased import density in those sectors. By 2024, steel, automobiles, machinery, electrical equipment, and pharmaceuticals accounted for 77.5 percent of the United States' $1.2 trillion goods trade deficit.[19]

The loss of domestic production capability for capital-intensive industries like advanced manufacturing and commodity production, particularly in sectors crucial for infrastructure development, technology, and energy security, are now considered national security concerns. Semiconductors, for example, were invented in the United States, once primarily produced in the United States, and remain critical inputs in defense and aerospace manufacturing, as well as a vast array of consumer products. After decades of outsourcing production, however, semiconductors are now a major contributor to the U.S. trade deficit,[20] which hit almost $415 billion in advanced technology products in 2025, an increase of almost 40 percent over the previous year.[21]

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In fact, the loss of domestic production led to the passage of the CHIPS and Science Act of 2022, a major federal investment in the domestic production of advanced and legacy semiconductors critical to the nation's national security. At the time of negotiation on the bill, the U.S. Secretaries of Commerce and Defense urged Congress to pass the bill as quickly as possible for the sake of the country's security.[22] In a letter, they wrote that a failure to act would "entrench our overdependency on other nations for our semiconductors – a vulnerability that requires immediate attention. Funding the CHIPS Act is critical to our national defense." Similarly, the Inflation Reduction Act of 2022 (IRA) provided significant funding and incentives to expand domestic manufacturing capacity and strengthen supply chains for clean energy technologies, batteries, critical minerals, and other strategically important products. The legislation reflected a growing recognition that reducing dependence on foreign oil

should not simply be replaced by new dependencies on foreign supply chains for the technologies, materials, and components needed to power the next generation of energy production and transportation. If the United States had been more aggressive in monitoring and addressing unfair trade and global market disruptions in these sectors earlier, it might have avoided the need for these bills and the billions in federal funding necessary to reestablish U.S. capacity.

Primer on AD/CVD Cases

Antidumping and countervailing duty (AD/CVD) cases are longstanding quasi-judicial trade enforcement actions adjudicated by the U.S. government to offset unfair foreign pricing and subsidies. They should be considered a market stabilizer tool in a circumstance where non-market actions inhibit fair competition. Antidumping duties counter imports from foreign companies that sell products into the U.S. market at prices below normal value, typically measured against home market prices or constructed production costs, which is known as "dumping." Countervailing duties apply to imports that benefit from unfair government subsidies, helping offset the advantage those subsidies provide and restore fair competition for American producers.

The AD/CVD process follows a two-track investigation: The U.S. Department of Commerce determines if dumping or subsidization is occurring and calculates the margin, or extent of the market distortion, while the U.S. International Trade Commission (ITC) determines if the U.S. industry is being materially injured, or threatened with material injury, by those imports. Domestic producers and workers, including unions representing the affected industry, may petition for relief and participate in the proceeding. If both agencies make preliminary and final determinations that unfair trade has occurred and that it has caused, or threatens to cause, harm to a U.S. industry, an AD/CVD order is issued requiring importers to pay additional duties designed to offset the unfair advantage and restore a level playing field for U.S. manufacturers and workers.

In recent decades, the ITC has issued an increasing number of affirmative material injury determinations across a range of sectors heavily affected by unfair trade practices. The steel and aluminum sectors have been the most frequent petitioners.[23] Many other sectors, however, are resorting to seeking relief from unfair trade. In May 2025, the ITC determined unanimously that U.S. solar manufacturers were materially injured by unfairly subsidized, low-priced solar imports from four Southeast Asian nations.[24] Other sectors benefiting from affirmative determinations include wood moldings and millwork and quartz surface products.[25] These rulings are not political judgements. They are based on evidence developed through fact-based investigations conducted by career trade professionals and evaluated under standards established by Congress and subject to judicial review. They allow domestic companies to stabilize their market share, expand domestic production capacity, and avoid layoffs. The duties do not provide an advantage; they are designed to restore fair competition.

LIMITATIONS OF AD/CVD CASES

While AD/CVD cases play an essential role in restoring fair competition and countering unfair trade practices, they operate within a global marketplace that continues to be affected by excess capacity, foreign subsidies, and other market distortions. Because these cases look backwards, foreign manufacturers often "circumvent" duties by slightly modifying the product or shifting assembly to a third country in order to re-enter the U.S. market. Common tactics include transshipment, in which goods are routed through a third country to mask their true origin, or the performance of "minor finishing" operations — such as final assembly or painting — in a non-subject country to claim a new country of origin. Some foreign manufacturers also engage in product shifting: slightly altering the chemical composition, physical dimensions, or technical specifications of a product so it falls outside the scope of an existing duty order while still serving substantially the same commercial purpose. In certain industries, like silicon solar modules, foreign manufacturers have been able to move production to another country prior to the AD/CVD investigation resulting in final duties.[26] In other words, trade enforcement increasingly confronts a moving target. Foreign producers can shift production, alter supply chains, modify products, or develop new circumvention and evasion strategies while an investigation is still underway, potentially reducing the effectiveness of a remedy before it is even imposed. U.S. trade enforcement must be sufficiently nimble to respond to these rapidly changing practices in real time, rather than forcing domestic producers to begin a new enforcement process each time foreign producers change their behavior.

The strength of AD/CVD cases lies in their fact-based, rules-driven investigative process; however, the time required to develop a complete evidentiary record can allow unfairly traded imports to inflict significant harm before final relief is imposed. A single investigation can

take over a year to reach a final determination, during which time a surge of unfairly traded imports can cause irreparable harm and lead to factory closures or bankruptcies before any duties are collected. This time lag is compounded by the significant financial burden placed on domestic producers and petitioners. The legal and economic expertise required to navigate Commerce's exhaustive questionnaires can cost petitioners millions of dollars per case. For a small producer operating on low margins, the cost of pursuing a case may exceed the potential commercial benefits, making the process a losing financial proposition from the start. What's more, the ITC injury standard can be particularly difficult to satisfy for emerging industries and startups that lack extensive production history, large shipment volumes, or long-term financial records. As a result, this combination of high upfront legal costs and a year-plus wait for relief creates a system that effectively shuts out smaller manufacturers and emerging sectors, even when they are experiencing substantial harm from unfair trade.

Primer on Presidential Tariff Actions

AD/CVD cases are not the only tools available to tackle unfair trade practices and the national security issues that can arise from subsidies, state direction, price controls, forced technology transfers, capacity mandates, and other non-market practices. They remain indispensable to restoring fair competition, but product shifting, transshipment, cross-border subsidization, duty evasion, chronic global excess capacity, and limitations in the international trading system can reduce the speed, scope, and durability of the relief AD/CVD cases provide. Recognizing these realities, Congress also granted the president authority to impose tariffs and adjust imports under specific circumstances through a different set of processes. Given a history of persistent market distortions and uneven enforcement of international trade rules, presidents of both parties have exercised these authorities, and with increasing frequency in the last decade. It stands to reason that if global institutions like the WTO had consistently functioned as originally envisioned, American presidents may have felt less need to rely on these additional powers.

Under Section 232 of the Trade Expansion Act of 1962, a president may impose tariffs, quotas, or other import restrictions after a Department of Commerce investigation determines that imports threaten to impair national security.

PRESIDENTIAL USE AND HISTORY

Under Section 232 of the Trade Expansion Act of 1962, a president may impose tariffs, quotas, or other import restrictions after a Department of Commerce investigation determines that imports threaten to impair national security. Throughout the 1970s and 1980s, Presidents Carter and Reagan used Section 232 in response to energy security concerns related to petroleum imports, including restrictions on Iranian and Libyan oil. In 2018, President Trump applied Section 232 to industrial materials, imposing a 25 percent tariff on steel and 10 percent tariff on aluminum. President Biden subsequently maintained many of these tariffs, while converting certain arrangements with allies into tariff-rate quotas. After returning to office in 2025, President Trump strengthened the Section 232 steel and aluminum measures in response to continued global excess capacity, transshipment, and other forms of trade circumvention that had weakened the effectiveness of earlier actions. Trump also extended the use of Section 232 authorities to additional sectors, including automobiles, copper, polysilicon, and lumber.

Under Section 301 of the Trade Act of 1974, a president may respond to unjustifiable, unreasonable, or discriminatory trade practices by foreign countries that burden or restrict U.S. commerce following an investigation and determination by the Office of the U.S. Trade Representative. As such, Section 301 provides presidents with a direct mechanism to address unfair trade practices that fall outside traditional AD/CVD proceedings. President Reagan used Section 301 extensively, initiating 49 investigations and most notably imposing 100 percent tariffs on certain Japanese semiconductor imports in 1987 following a trade dispute over market access and semiconductor trade practices. After the creation of the WTO in 1995, Presidents Clinton, Bush, and Obama used Section 301 more sparingly, often employing it as a vehicle for pursuing dispute settlement cases through the multilateral trading system. In 2018, President Trump revived the use of Section 301 to address China's technology transfer, intellectual property, and innovation practices, imposing tariffs on more than $300 billion in imports. President Biden maintained these tariffs and in 2024 increased tariff rates on a range of strategic sectors, including electric vehicles (100 percent), battery parts (25 percent), semiconductors (50 percent), solar cells (50 percent), and certain critical minerals (25 percent). After returning to office, President Trump largely preserved the Section 301 framework while supplementing it with additional tariff actions under other trade authorities and initiating new Section 301 investigations targeting emerging trade concerns.

Under Section 201 of the *Trade Act of 1974,* commonly known as the "Global Safeguard" authority, the United States may impose temporary tariffs or other import restrictions to protect a domestic industry that is seriously injured, or threatened with serious injury, by a surge of imports, regardless of whether those imports are traded unfairly. President Bush invoked Section 201 in 2002 to provide temporary relief to the domestic steel industry. In 2018, President Trump applied Section 201 to imported washing machines and solar products. President Biden later extended the solar safeguards in 2022, while separately providing a two-year pause on the collection of certain solar duties during an ongoing Commerce Department circumvention investigation.

Under Section 301 of the Trade Act of 1974, a president may respond to unjustifiable, unreasonable, or discriminatory trade practices by foreign countries that burden or restrict U.S. commerce following an investigation and determination by the Office of the U.S. Trade Representative.

IMPACTS OF EXECUTIVE AUTHORITY

Presidential tariff actions under Section 232 and Section 301 have a history of addressing broader national security concerns, systemic unfair trade practices, and market distortions that may not be fully addressed through traditional AD/CVD proceedings. While domestic industries often must wait a year or more for relief under traditional AD/CVD cases, presidential tariff actions can often be implemented more quickly and can address economy-wide or sector-wide challenges that fall outside the scope of product-specific AD/CVD investigations. The increased reliance on presidential trade authorities also offers a lesson for Congress. Where traditional trade remedies have proved too slow, costly, or narrowly tailored to address broader threats to domestic production, presidents have turned to authorities that permit a timelier and more comprehensive response. Accordingly, Congress should modernize U.S. trade laws so that manufacturers and workers have access to remedies capable of responding more quickly to rapidly evolving market conditions.

For example, the domestic steel and aluminum industries have benefited directly from Section 232 tariffs implemented in response to persistent global overcapacity and import-related national security concerns. The measures helped stabilize market conditions, preserve market capacity, and encourage billions of dollars in domestic steel and aluminum investments.[27] There is also evidence that these measures helped stabilize market conditions in industries with substantial domestic supply chains, supporting continued production, investment, and supplier relationships in the United States.[28] Some research suggests that

The increased reliance on presidential trade authorities also offers a lesson for Congress. Where traditional trade remedies have proved too slow, costly, or narrowly tailored to address broader threats to domestic production, presidents have turned to authorities that permit a timelier and more comprehensive response.

Section 301 tariffs under the first Trump administration neither increased nor reduced aggregate employment for tariff-protected sectors.[29] However, aggregate employment figures alone may not capture the full objectives of the policy, which included addressing unfair trade practices, preserving domestic productive capacity and job security, reducing supply chain vulnerabilities, and encouraging diversification away from China.

Because presidential trade actions are exercised through executive authority, their effectiveness is closely tied to businesses' confidence that the measures will remain in place long enough to support major investment decisions.[30] Over the past eight years, the most consequential feature of the Section 232 and Section 301 measures has been their durability across different administrations. Their retention by both the Trump and Biden administrations provided manufacturers with a degree of certainty that encouraged investment, capacity expansion, and supply chain reconfiguration. In fact, the Biden administration added to the Trump administration's existing Section 301 tariffs with its own increased rates on certain strategic sectors, such as steel and aluminum, automotive, and semiconductors. Both presidents identified persistent and worsening global overcapacity, unfair trade practices, and supply chain vulnerabilities as the impetus for continued trade enforcement action. Durability and certainty across administrations are critical for these and other trade measures to substantially improve outcomes for domestic industry through capital investment, reshoring, and stronger domestic supply chains.

Furthermore, because tariffs are designed to address market distortions, they change the competitive environment facing manufacturers and importers. Businesses do not operate in a vacuum where the only response to tariffs is higher costs and pricing decisions. Firms adjust sourcing strategies, reevaluate supplier relationships, and make long-term investment decisions in response to persistent trade enforcement. A 2023 ITC analysis found that the Section 232 tariffs had only limited effect on domestic prices, increasing prices for domestically produced steel and aluminum by 0.7 percent and 0.9 percent, respectively.[31] As foreign-produced steel prices adjusted higher, many downstream industries responded by increasing purchases of steel produced in the United States. The largest sourcing shifts occurred in the "Architectural and Structural Metal Manufacturing" and the "Boiler, Tank, and Shipping Container Manufacturing" sectors, each of which redirected more than $200 million toward domestic steel producers in 2021.[32]

Similarly, in response to the Section 301 tariffs on goods from China, businesses responded by diversifying sourcing and, in some cases, relocating production out of China altogether. According to that same ITC analysis, Section 301 tariffs had only a minimal impact on domestic prices and production: Prices for domestically produced goods rose by 0.2 percent, and the value of domestic production increased by 0.4 percent on average in the period following implementation. Prices for imports varied by sector, but over time U.S. firms responded less by absorbing higher costs and more by changing operational strategies. Substantial evidence shows that firms adjusted sourcing patterns and supply chain strategies in response to the Section 301 tariffs, reducing reliance on China and reevaluating long-term production and investment decisions.[33] While aggregate economic effects varied across sectors, the tariffs helped create more favorable conditions for domestic investment, capacity expansion, and supply-chain resilience while reducing dependence on production concentrated in China. These adjustments remain ongoing. While supply chains are still in flux, numerous firms have announced investments intended to expand U.S. production.

Case Studies

Aluminum in Oklahoma and South Carolina

Aluminum is a lightweight metal widely used in autos, power transmission infrastructure, military aircraft, and many other industrial and defense applications. While it is a capital-intensive commodity critical to national and economic security, it is produced under difficult global market conditions. As a commodity product, aluminum produced in one country is often largely interchangeable with aluminum produced elsewhere, even when the underlying conditions differ substantially. Once acquired, aluminum can also be stockpiled for years at a time without deterioration. Yet aluminum production operates under very different circumstances from country to country, varying in production technologies, regulatory environments, labor standards, energy costs, and levels of government support. As a result, aluminum produced under stricter environmental, labor, and regulatory standards often competes at the same global market prices as aluminum produced with subsidized energy, lower regulatory costs, or other government supports. Notably, high-purity primary aluminum produced in smelters is required for certain defense, aerospace, and advanced manufacturing applications. Around half of all aluminum consumed in the United States, whether primary or secondary, is supplied by imports.[34] The country's last high-purity aluminum production facility, located in Hawesville, Kentucky, idled in 2022.

GLOBAL MARKET CONDITIONS

Globally, aluminum production operates in one of the world's most difficult commodity markets, heavily impacted by global overcapacity, government intervention, and other market distortions. Throughout much of the 20th century, the United States was the world's top producer of aluminum, but by 2020 it accounted for less than 2 percent of global aluminum production and ranked ninth overall.[35] Outside of China, benchmark aluminum prices are generally determined through the London Metal Exchange. Every geopolitical event, including natural disaster, war, or economic shock, has the potential to quickly affect aluminum prices worldwide. For example, following Russia's invasion of Ukraine in February 2022, global aluminum prices rose 16 percent between January and March of that year.[36]

Throughout much of the 20th century, the United States was the world's top producer of aluminum, but by 2020 it accounted for less than 2 percent of global aluminum production and ranked ninth overall.

Today, China is the world's dominant producer of both primary and secondary aluminum. In the past two decades China went from producing a little over 10 percent of the world's aluminum to now accounting for 60 percent.[37] Central and provincial government support for large-scale smelter construction, without regard for market demand, has contributed to persistent overcapacity in global aluminum production.[38] New smelters were also constructed in China's Xinjiang region, where concerns regarding forced labor and coal-intensive power generation have attracted significant international scrutiny.[39]

Even as it set its own price for aluminum under the Shanghai Futures Exchange, China's production decisions have significant effects on global aluminum market conditions and prices. If China subsidizes additional production of aluminum and encourages the dumping of the commodity in the Indo-Pacific region, let alone the wider global market, global aluminum prices can come under significant downward pressure. As a result, investment decisions and production capacity in the United States are heavily influenced by global market conditions shaped by China's industrial policies and state support for aluminum production. Without effective trade enforcement and policies that address market distortions and hold bad actors accountable, U.S. producers and smelters operate in global conditions consistently vulnerable to overcapacity and unfair trade practices.

TIMELINE OF FEDERAL POLICY

Trade Security

In 2017, the first Trump administration initiated a Section 232 investigation into the national security and economic concerns associated with declining domestic aluminum production capacity and rising import penetration, including pressures associated with persistent global overcapacity. After the Commerce Department determined that aluminum imports threatened to impair national security by undermining domestic production capacity, the administration put in place a 10 percent tariff on imported aluminum in 2018. While domestic aluminum production has been on a steady decline for several decades, ITC analysis found that U.S. aluminum output increased 3.6 percent during the year following the Section 232 action.[40]

Following those tariffs, Century Aluminum made over $110 million in investments over several years in its Mt. Holly, South Carolina, facility[41;42] and over $116 million in investments in its Hawesville, Kentucky, facility.[43] In January 2020, the Trump administration extended tariffs to derivative aluminum products. After returning to office in 2025, President Trump strengthened the Section 232 aluminum action by eliminating country exemptions and certain product exclusions, expanding coverage to additional derivative aluminum products, and increasing the tariff rate from 10 percent to 25 percent. The aluminum tariff was subsequently increased to 50 percent in June 2025. Output then remained relatively stable until the COVID-19 pandemic, when domestic aluminum production resumed its decline. While this decline, combined with the spiking of global energy costs, forced Century to curtail operations at Hawesville in 2022, the company has consistently identified trade enforcement as an important factor in its capital investment decisions and long-term planning.

Federal Industrial Investments

In the next few years, the U.S. Congress, the Biden administration, and the second Trump administration made commitments to strategic industrial investments that helped support additional private sector investment in U.S. primary aluminum production. In 2022, the 117th Congress passed a series of laws aimed at increasing American production of materials, inputs, and products critical to national and energy security, including the creation and expansion of incentives such as the 45X Advanced Manufacturing Production Tax Credit. In the lead-up to negotiations over these legislative packages, there was substantial academic evidence that federal investments could help spur private sector investment. In the years that followed, companies announced hundreds of billions of dollars in manufacturing investments across a range of strategic sectors.

In early 2025, as a result of the additional energy-related funding passed into federal law, Century received a $500 million Energy Transformation Grant from the U.S. Department of Energy's (DOE) Office of Clean Energy Demonstrations to advance construction on the first new primary aluminum smelter in the United States since 1980.[44] The project illustrates how trade enforcement, industrial policy, and private sector investment can work together to support the expansion of domestic production capacity in a strategically important industry.

RESULT FOR PRIVATE INDUSTRY

Following a series of domestic investments at its South Carolina facility, as well as several years of evaluating potential site locations, Century in January 2026 announced a partnership with Emirates Global Aluminum (EGA) in Oklahoma to develop the first new primary aluminum smelting facility in the United States in nearly five decades. The facility is projected to double U.S. primary aluminum production capacity and create 4,000 construction jobs and more than 1,000 permanent jobs locally.[45]

If the economic impact of Century's other facilities, such as the Mt. Holly, South Carolina, facility, is used as a point of comparison, the local community in Inola, Oklahoma, could expect these 1,000 permanent jobs to pay over $1 billion in labor income over time, on average over $100,000 annually, and create more than 1,000 indirect jobs paying more than $70,000 annually.[46] The current wages for workers directly employed at the Mt. Holly facility are 90 percent higher than other comparable jobs in South Carolina. It is noteworthy that the majority of the workforce comes from historically underrepresented communities, and due to local spending, the broader economic multiplier of Century's investment would support two additional jobs for every one that Century creates.[47] What's more, Century does not require a college degree for entry-level positions and trains its workers in-house, meaning that the jobs created by the investment will be immediately accessible to the local community's high school graduates, providing pathways into advanced manufacturing careers for local workers.

Century and EGA officials have stated that the project will serve as the foundation for a broader aluminum industrial hub in Oklahoma, which could, in turn, create thousands of additional downstream jobs as part of a broader domestic supply chain. For instance, EGA also owns an aluminum recycling plant in Rosemount, Minnesota, potentially leading to the creation of additional transport needs on routes across the central United States.

Solar Power in Ohio, Arizona, Louisiana, and Alabama

Solar power generation was born in the United States. In 1954, researchers at Bell Laboratories developed the first practical silicon-based photovoltaic (PV) cell capable of generating electricity for commercial applications.[48] Within a few years, California-based manufacturer Hoffman Electronics improved Bell's solar efficiency technology and started producing solar products commercially. By the 1970s, PV cells were widely used in space and became the dominant source of power for U.S. and Soviet spacecraft. Cadmium telluride (CdTe) thin film, the leading commercial alternative to crystalline silicon, was commercialized in the United States, in Toledo, Ohio, where researchers developed a way to turn glass into a solar module in the 1980s. All told, solar technology is a signature achievement of American innovation and manufacturing, with applications spanning aerospace, energy production, defense, and advanced technology industries.

Today, the solar industry is a rapidly growing sector that supports hundreds of thousands of American jobs through both manufacturing and deployment. Solar currently represents over half of the generation capacity the U.S. will add to the electricity grid this year, with deployed solar increasingly made through domestic manufacturing.[49] From 2021 to 2026, U.S. nameplate solar module production capacity rose from 5 gigawatts (GW) to over 60GW and cell capacity rose from 2.6GW to 36GW. A single American company, First Solar, will exit 2026 with 15GW of fully vertically integrated capacity, representing 25 percent of U.S. solar module capacity and almost 42 percent of consolidated crystalline silicon and thin film solar cell capacity.

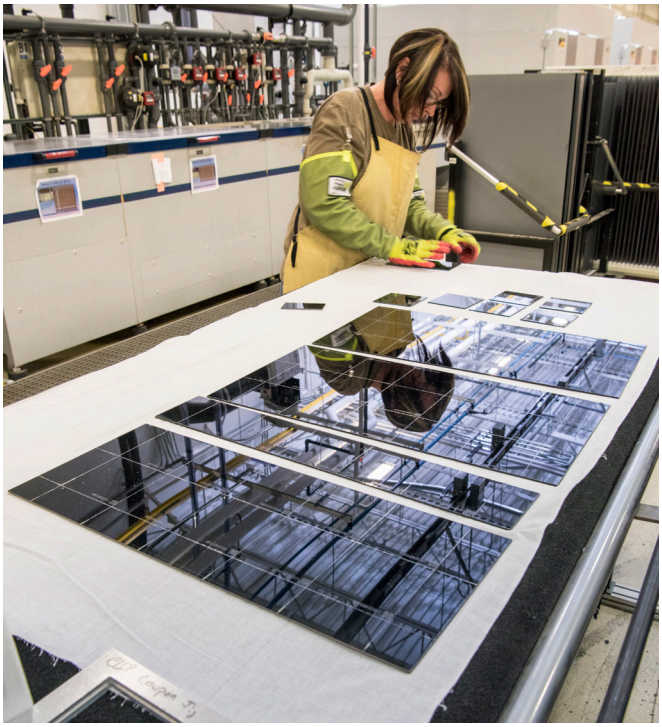
Solar currently represents over half of the generation capacity the U.S. will add to the electricity grid this year, with deployed solar increasingly made through domestic manufacturing.

However, the industry faces significant headwinds. Today it relies on two technologies: crystalline silicon and CdTe thin film. The crystalline silicon value chain is energy and capital-intensive, requiring multiple factories to transform metallurgical grade silicon into polysilicon, and produce polysilicon ingots, which are converted into crystalline silicon wafers and cells before being assembled into solar panels. On the other hand, the CdTe manufacturing process, which was developed and scaled by First Solar, allows for the production of wafers and cells in a single process that takes place on the same conveyor belt under one factory roof with a lower energy and cost profile. While the U.S. has become less dependent on imported solar panels and fully vertically integrated thin film solar manufacturing has expanded, significant dependencies on foreign crystalline silicon components and equipment supply chains remain. Despite significant policy changes to boost domestic solar manufacturing, without proper implementation of trade policy and reliable industrial policy, the industry remains vulnerable to global overcapacity, unfair trade practices, and import surges, while the United States remains exposed to foreign supply chains for solar inputs for power generation. In other words, the 60GW module capacity headline belies a story of continued dependence on adversarial supply chains.

GLOBAL MARKET CONDITIONS

In the global solar technology market, China is the unavoidable elephant in the room. In 1986, China launched a long-term strategy to expand its role in PV supply chains and ultimately dominate the sector through its Seventh Five-Year Plan, which guided government industrial policy and support policies backed by significant state funding.[50]

Between 2011 and 2022, China invested over $50 billion in crystalline silicon PV production.[51] These government subsidies were accompanied by a slate of policies that reduced production costs, including wage suppression, local governments offering



Worker cuts glass modules at First Solar's manufacturing plant in Perrysburg, Ohio.

Credit: U.S. Department of Energy

land at little or no cost, low-interest or interest-free financing from state-owned banks, and, crucially, energy costs supported by extensive coal-fired power generation.[52] To date, over half of polysilicon production in China is based in the Xinjiang region, where there are widespread allegations of forced labor and human rights abuses.[53]

As a result, China today produces more than 80 percent of the world's solar panels.[54] What's more, Chinese-owned and controlled companies dominate each stage of the crystalline silicon solar supply chain,[55] producing more than 98 percent of the world's PV ingots, 97 percent of PV wafers, and 81 percent of solar cells.[56] This concentration of production and supply chain dominance gives Chinese manufacturers substantial influence over global prices for crystalline silicon solar products and inputs, creating barriers to entry for nascent entrepreneurs and significant challenges for competing producers not tied to Chinese manufacturers.

Although this global circumstance affects American producers, it is not a uniquely American issue. In Europe, crystalline silicon solar manufacturers faced many of the same market conditions where China heavily subsidized its production and crippled the ability for European clean energy producers and manufacturers to compete on a level playing field. Many European manufacturers were forced to reduce operations, exit the market, or declare bankruptcy, leaving the continent increasingly dependent on imported Chinese solar panels to support solar deployment and its clean energy goals.[57]

TIMELINE OF FEDERAL POLICY

Trade Security

For the solar manufacturing industry, strong and consistent enforcement of trade laws is critical to onshoring solar manufacturing and creating durable domestic supply chains. U.S. AD/CVD enforcement actions since 2012 have been applied to Chinese PV solar imports, stemming from federal investigations that found Chinese producers benefited from actionable subsidies and dumped solar products into the U.S. market "at less than fair value",[58] materially injuring domestic producers.

Subsequent enforcement actions also addressed efforts to shift production through third countries to evade existing duties. In September 2026 Commerce announced final affirmative determinations in an AD/CVD case involving solar imports from Laos, Indonesia, and India, confirming that Chinese-owned companies receive subsidies from China.[59] It is the fourth case involving many of the same Chinese companies that have been shifting production across countries, also known as "country hopping," to avoid duties assessed in previous cases.

In 2018, the first Trump administration imposed "solar safeguard" tariff measures on imported solar cells and modules under Section 201 of the Trade Act of 1974, which authorizes a president to provide relief to domestic manufacturers harmed by import surges that cause or threaten serious injury. In the same year, the Trump administration also imposed tariffs on imports from China under Section 301 of the same law, which authorizes measures to counteract foreign trade practices that are unjustifiable, discriminatory, or restrict U.S. commerce. The Section 301 tariffs on Chinese imports remain in effect, although tariff coverage and rates have evolved over time through subsequent administrative actions.

In June 2022, the Uyghur Forced Labor Prevention Act (UFLPA) became fully effective, after being signed into law in December 2021. With significant evidence of forced labor in China's solar polysilicon supply chain,

the UFLPA offered a solution to deter the purchase of solar goods made with forced labor. China's government has combated enforcement of the law and implementation of its ban of imports made with forced labor has remained challenging due to traceability issues. U.S. Customs and Border Protection (CBP) statistics show a majority of products detained under the UFLPA every year are solar products. While deterring forced labor, the UFLPA does not counter other forms of market manipulation in China's solar sector.

In December 2022, the Biden administration's Commerce Department determined that solar cells and modules completed in Cambodia, Malaysia, Vietnam, and Thailand were circumventing the existing AD/CVD orders on Chinese solar products.[60] While Commerce ultimately issued a final affirmative circumvention determination, the Biden administration imposed a two-year enforcement pause beginning in June 2022, temporarily suspending the collection of AD/CVD duties associated with the circumvention determination.[61] This action was taken to prevent disruptions to U.S. solar deployment, even though it was clear the imported panels and components were unfairly traded. This action led to significant stockpiling of solar modules. The pause ended in June 2024, and in August 2025 the U.S. Court of International Trade (CIT) determined that the action exceeded the administration's statutory authority. The CIT's ruling is being appealed, and a future ruling could lead to significant retroactive duties on many U.S. solar importers.[62]

In August 2026 the Trump administration issued Proclamation 11052 following a Section 232 finding that eroding U.S. polysilicon production capacity – down from roughly 50 percent of global market share in 2005 to under 2 percent by 2024, amid a more than 270 percent rise in global capacity and a more than 400,000-ton stockpile overhang – threatened national security. Effective December 2026, the action combines a minimum import price (MIP) regime for polysilicon, ingots, wafers, cells, and modules; a flat 15 percent ad valorem tariff on the same categories, and a discretionary Commerce onshoring program for qualifying domestic investments begun by January 2029.[63] Combined, the MIP and tariff yield an effective floor near 43.7 percent on covered modules, replacing the prior Section 201 safeguard tariff that expired in February 2026. This novel structure, if implemented thoughtfully, could result in durable protections for U.S. solar manufactures against dumping. Implementing regulations and enforcement will determine the action's long-term effectiveness.

Federal Industrial Investments

In 2009, as part of the American Recovery and Reinvestment Act, the United States invested billions in clean energy manufacturing capital expenditure-based tax credits and loan guarantees under Internal Revenue Code Section 48C and the DOE Loan Guarantee Program. Advanced manufacturing is a capital-intensive sector that can benefit significantly from policies that reduce upfront costs and barriers to entry.

In 2022, the 117th U.S. Congress passed a series of investments as part of the IRA that changed the overall demand structure for the solar sector in positive ways. In particular, the new law invested in the production side of manufacturing with Section 45X tax credits to incentivize the production of solar, wind, battery components, inverters, and critical minerals in the United States. For the solar industry, this was an important shift because it supported the ongoing costs associated with domestic manufacturing production, which is capital-intensive and subject to headwinds stemming from the constant requirements of physical production. Section 45X production credits allow an industry to not just benefit from startup help; it enables it to grow and scale the business toward mass production.

Production credits, however, are only as effective as the rules governing who can claim them. Much of the domestic module capacity built since 2022 belongs to subsidiaries of Chinese-headquartered manufacturers, or to firms that depend on Chinese-owned entities for cells, wafers, technology licensees, or equipment. Absent restrictions, Section 45X would have subsidized the same companies whose state-backed overcapacity the credit was meant to counter – assembling imported components into finished panels on U.S. soil and collecting a federal credit for doing it. Congress addressed this in the One Big Beautiful Bill Act, which conditioned Section 45X on foreign entity of concern restrictions, barring credits to entities owned or controlled by covered foreign entities and limiting the share of material assistance that may come from them. Those restrictions are now the principal line between a domestic manufacturing base and a domestic assembly operation for a foreign supply chain. Their effectiveness will turn on Treasury's implementing guidance, particularly how ownership thresholds treat restructured entities and how material assistance is traced upstream.

In addition to production-side incentives, lawmakers also attempted to influence downstream purchasing behavior through a domestic content bonus credit for clean energy developers in the Section 45, 48, 48E, and

45Y credits. The intent of this provision was straightforward: Even with expanded manufacturing tax credits in place, project developers might still prefer dumped Chinese components unless there was a direct financial incentive to procure American-made products containing domestic components. While the U.S. Department of Treasury guidance implementing this policy was imperfect, and did not arrive in full until January 2025, this complementary demand-side support recognized the global market distortions facing clean energy manufacturers and the broader domestic supply chain. These Section 45, 48, 48E, and 45Y credits were rolled back by Congress in 2025 in the One Big Beautiful Bill Act and are inaccessible for projects that began construction after July 2026 for the utility scale market.

The experience of the solar industry demonstrates that creating a durable domestic manufacturing base requires both effective trade enforcement and industrial policies that support long-term investment, production, and supply chain development. With a level playing field, America can once again become a leader in solar manufacturing.

RESULT FOR PRIVATE INDUSTRY

First Solar is the largest solar manufacturer in the Western Hemisphere. It is headquartered in Arizona, with three manufacturing facilities in Ohio, a facility each in Alabama and Louisiana, and a sixth expected to begin operations in South Carolina in 2026.[64]

Catalyzed by a combination of federal trade measures to level the playing field against Chinese manufacturers and billions of dollars in strategic manufacturing and R&D investments, First Solar has steadily scaled its U.S.-based operations. It announced its second Ohio facility in response to the solar safeguard measures announced by the Trump administration in 2018. The company expanded further in response to the 45X advanced manufacturing tax credits. From the company's perspective, the Section 201 safeguards helped create a temporary period of market stability that supported additional investment. While the Section 201 mechanism was well-intended, and prompted numerous announcements for new U.S. solar manufacturing, the declining tariff rates, the tariff-rate quota for cell imports, and the loophole for bifacial modules all eroded the long-term effectiveness of the tariff regime. Ultimately, only a limited number of announcements materialized.

Over the past decade, First Solar added approximately 15 GW of nameplate domestic manufacturing capacity, including two facilities in Alabama and Louisiana, each with 3.5 GW of annual capacity, which commenced operations in September 2024 and November 2025, respectively. Its new R&D center in Ohio is expected to accelerate thin film technology development, helping maintain American leadership in next-generation PV technologies. Recent analysis showed First Solar accounted for approximately 39% of all U.S. module production[65] and about a quarter of all U.S. PV manufacturing capital expenditures[66], both on a cumulative basis.

Overall, the company's commitment to American manufacturing represents a $4.5 billion capital investment in advanced manufacturing and technology development, and it is on track to achieve more than 17 GW of annual domestic manufacturing capacity, sufficient to serve approximately half of the country's utility-scale solar demand.

First Solar's direct U.S. workforce grew to 4,785 employees by the end of 2025 and is projected to reach approximately 6,500 by 2027.[67] The company supported an estimated 30,000 direct, indirect, and induced jobs in 2025 and is forecast to support over 39,000 jobs by 2027, representing an average total compensation of $101,145 per worker on a fully loaded basis, more than double the national median personal income.

Based on updated economic analysis conducted by the University of Louisiana at Lafayette, First Solar has a sizable economic multiplier due to its commitment to domestic supply chains. Every First Solar job supports approximately six direct, indirect, and induced jobs around the country.[68] Economic multipliers are an important tool for policymakers to evaluate the return on investment from policies that help generate private sector job creation. Manufacturers with extensive domestic supply chains tend to generate larger economic spillover effects because more purchasing, employment, and investment activity occurs within the United States.

In this case, First Solar manufactures solar panels using American-made glass and steel. The company's Alabama steel supply chain is fully located within a 25-mile radius of its Lawrence County facility. Its glass comes from Illinois, Ohio, and Pennsylvania; silica for the glass is sourced from Michigan; while soda ash comes from Wyoming. Wooden packaging materials are supplied by a family-operated business in Indiana. A copper mine in Utah provides a vital domestic source of tellurium for its semiconductor materials.[69]

First Solar's growth illustrates how trade enforcement and industrial policy can work together to support domestic manufacturing capacity, strengthen upstream supply chains, and reduce reliance on foreign-dominated solar supply chains.

Steel in Pennsylvania, Ohio, and Indiana

For much of the 19th and 20th centuries, steel dominated industrial production in the United States. The metal was the backbone of American growth, serving as the chief commodity in the expansion of railroads, skyscrapers, and the automotive industry. Steel production powered the economic rise of major American cities in the industrial Midwest including Pittsburgh (once producing nearly half of the nation's steel) and Bethlehem, Pennsylvania; Gary and East Chicago, Indiana; Youngstown and Cleveland, Ohio; Detroit, Michigan; and Buffalo, New York.

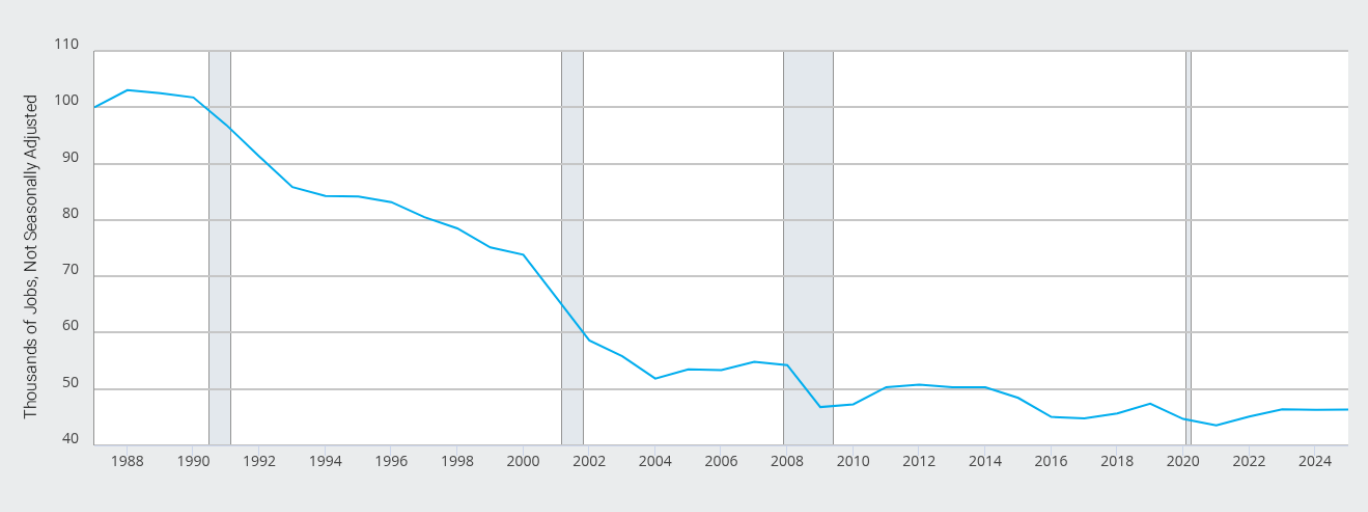
Beginning in the postwar period and accelerating through the 1970s and 1980s, American steel producers faced growing competitive pressure from modernized foreign competitors, rising imports, and the evolution of unfair trade and market distortions that contributed to a gradual erosion of the industry's global market share. The industry confronted a surge of imports that led to widespread layoffs, mill closures, and a series of antidumping investigations that found instances of foreign steel being sold in the United States at unfairly low prices, while steelworkers warned that growing import penetration threatened the long-term viability of domestic production. Although today's global steel market differs significantly from that period, many steelworkers draw parallels between the import pressures in the late 20th century and the overcapacity challenges posed by China in the 21st century.

The scale of today's challenge is significantly different from those in the 20th century. In recent decades, China has emerged as the dominant force shaping global steel market conditions through its state-supported expansion of steelmaking capacity. Chinese steel production grew from around 30 million metric tons (MMT) in 1978 to over 800 MMT annually by 2015, accounting for roughly half of all global steel output.[70; 71]

Because steel production jobs ranked among the highest-paid industrial jobs in the United States, the steel sector's ensuing decline had profound consequences for the economic vitality of communities built around

DATA INSIGHTS

Employment for Iron and Steel Manufacturing in the United States, 1987–2025



Employment for Manufacturing: Iron and Steel Mills and Ferroalloy Production (NAICS 3311) in the United States, 1987=100

Source: U.S. Bureau of Labor Statistics via FRED®, fred.stlouisfed.org
Shaded areas indicate U.S. recessions.

Chinese steel production grew from around 30 million metric tons (MMT) in 1978 to over 800 MMT annually by 2015, accounting for roughly half of all global steel output.

domestic steel mills. In fact, the Trade Act of 1974 reflected, in part, political concern about unfair trade in steel and other heavy industrial sectors. Despite its passage, these challenges persisted for decades. The steel industry lost hundreds of thousands of workers throughout the country, eroding the commercial and residential tax base in many industrial communities and hampering long-term investment and economic diversification.

GLOBAL MARKET CONDITIONS

Of all global producers, China is the country with the most significant impact on global market conditions in the steel sector. China overtook Japan in 1996 to become the world's largest crude steel producer when its output reached roughly 101 MMT in 1996.[72] With its accession to the WTO in 2001, China pursued a strategy to rapidly expand steel production. Since then, steel output has consistently outpaced global demand, creating a persistent and severe global steel overcapacity problem. China's overcapacity has had cascading effects throughout global steel markets, while governments in other countries have responded with their own support measures, further distorting global supply and demand.

The Chinese government acknowledged overcapacity in the mid-2000s and again in the 2010s by issuing guidelines "to actively and effectively resolve severe overcapacity issues in industries such as steel, cement, electrolytic aluminum, flat glass, and shipbuilding, and to guide the resolution of overcapacity in other industries."[73] However, production reductions have fallen well short of announced targets. Many provincial and local governments depend on steel production for employment, fiscal revenue, economic growth, and political stability, entrenching excess capacity within broader economic planning.[74] The result is that global steel overcapacity has become a persistent and structural feature of China's industrial policy, particularly in heavy manufacturing sectors, with spillover effects throughout international markets, supply chains, and investment decisions.[75]

Today, the Organisation for Economic Co-operation and Development projects that global steel excess capacity will reach 745 MMT by 2028, a volume roughly eight times greater than total annual U.S. steel production.[76] This enormous surplus continues to depress prices globally – distorting markets, incentivizing export-driven production, and placing sustained pressure on domestic steel producers and workers.

TIMELINE OF FEDERAL POLICY

In 2016, the ITC issued final determinations in multiple AD/CVD investigations covering corrosion-resistant and flat-rolled steel products, including imports from China. Commerce found AD/CVD margins exceeding 200 percent on certain Chinese products after determining they were dumped and subsidized, while the ITC determined these imports caused material injury to the domestic steel industry. These determinations triggered subsequent industry-requested investigations into circumvention, including whether Chinese steel products were being transshipped through third countries such as Vietnam to evade the existing orders. These cases marked the beginning of a broader effort to address increasingly sophisticated forms of trade evasion, including transshipment, country-hopping, and other forms of circumvention.

In 2018, following the AD/CVD determinations under the previous administration, President Trump applied a 25 percent tariff under Section 232 on most steel imports after Commerce concluded that import levels threatened to impair national security by undermining domestic steel production capacity. Indeed, in the first two decades of the 21st century, the decline in the steel industry was dramatic. Between 2000 and 2015, the domestic steel industry closed over 10 major mills and lost over 225,000 workers.[77]

Beginning in 2021, the Biden administration retained the core Section 232 framework while negotiating alternative arrangements with key trading partners. These arrangements included tariff-rate quotas, country exemptions, and, in some cases, absolute quota arrangements that limited the volume of imports permitted to enter the United States. Together with a growing volume of product exclusions, these arrangements reduced the effective coverage of the Section 232 measures. Steel imports surged to 31.5 million net

tons in 2021, up 43 percent from the previous year and the highest volume since the Section 232 action took effect in 2018.[78]

In 2024, President Biden utilized Section 232 authority to impose a 25 percent tariff on steel imported from Mexico that was not "melted and poured" in either Mexico, the United States, or Canada. This action was intended to address concerns that Chinese and other foreign steel was entering North America through Mexico in ways that undermined the objectives of existing Section 232 measures and to reinforce North American supply chain integrity.

In his second term, President Trump issued proclamations in February 2025 using Section 232 authority to eliminate country exemptions, end certain exclusions, expand coverage to downstream "derivative" products, and reinstate a 25 percent global steel tariff.[79] These actions reflected concerns that foreign producers had increasingly adapted to earlier trade measures by shifting production into downstream steel-containing goods or utilizing country-specific arrangements and exclusions that reduced the effectiveness of the original Section 232 program. By expanding coverage to derivative products and eliminating many exemptions, the administration sought to close avenues for circumvention and restore broader coverage of the national security action.

The steel tariff rate was subsequently increased to 50 percent in June 2025 in response to persistent global overcapacity and sustained import pressure.[80] The Trump administration further expanded derivative coverage to include additional steel-containing products such as motorcycles, lawnmowers, automotive components, and grain-oriented electrical steel transformer cores and laminations used in the electric grid.

RESULT FOR PRIVATE INDUSTRY

As a result of major trade enforcement actions initiated in 2016 and maintained across multiple administrations, domestic steel producers experienced improved market conditions that supported reinvestment, capacity utilization, and long-term planning. Flat-rolled steel cases helped stabilize capacity utilization at U.S. facilities, while Section 232 actions further improved market conditions. Vertically integrated and electric arc furnace (EAF) steel producers responded with significant investments in domestic facilities. These improved conditions contributed to approximately 5 MMT of announced additional domestic steelmaking capacity and supported tens of thousands of direct and indirect jobs.[81] Collectively, the industry announced more than $22 billion in capital investments during this period.[82] This was in addition to the broader impacts of the industry, which supports over 2 million direct and indirect jobs.[83]

Domestic steel investments included long-delayed modernization and technological upgrades at existing facilities. Following the 2018 implementation of the Section 232 tariffs, Cleveland-Cliffs completed multi-billion-dollar acquisitions of AK Steel and ArcelorMittal USA and invested nearly $1 billion in a hot-briquetted iron facility in Toledo, Ohio, creating a new domestic source of high-value iron inputs for domestic steel production while supporting both supply chain resilience and emissions reduction goals.



Cleveland Cliffs Cleveland Works is an integrated steelmaking facility that includes two blast furnaces.

For steelworkers, increased profitability at unionized steel producers contributed to greater employment stability and improved outcomes for workers after decades of contraction and uncertainty.

Trade enforcement mechanisms, including AD/CVD and Section 232 tariffs, are closely linked to outcomes for workers. Prior to these enforcement actions, surges of unfairly traded imports exerted sustained downward pressure on prices and profitability, eroding profit-sharing structures that had historically made up a significant share of total compensation. Worker testimony underscores these impacts. Before the ITC, USW Local 6787 President Pete Trinidad, who represents workers at Cleveland-Cliffs' Burns Harbor, Indiana, mill, testified that import pressure had reduced worker earnings by "20–25% of … annual income."[84]

The benefits of these investments extended beyond steel producers themselves. Modernization projects, facility upgrades, and new production capacity supported construction jobs, strengthened demand for domestic suppliers, and helped preserve steelmaking capabilities that are difficult to replace once lost. For communities in Indiana, Ohio, and Pennsylvania, the health of the steel industry remains closely tied to broader economic opportunity and regional industrial competitiveness. Just as importantly, these investments helped ensure that the United States maintains the industrial capacity, skilled workforce, and specialized production capabilities necessary to meet critical infrastructure, energy, and national defense requirements, which was a central objective of the Section 232 action.

ONGOING RISK

The stabilization of domestic production after 2016 helped arrest a decades-long decline in domestic steelmaking, preserving employment across integrated and EAF operations, supporting facility modernization, and maintaining critical production capabilities that had been threatened by import surges and global overcapacity. However, global steel remains a significant and growing challenge that poses systematic risks. In this environment, trade enforcement has functioned as a necessary but incomplete response to persistent market distortions and state-supported overcapacity. While trade enforcement measures have not resolved underlying causes of global overcapacity, they have stabilized domestic markets, supported reinvestment, preserved critical steelmaking capabilities, and mitigated further job losses in a strategically vital industrial sector. As long as global overcapacity remains measured in the hundreds of millions of metric tons, maintaining a robust trade enforcement framework will remain essential to preserving the steelmaking capacity, skilled workforce, and industrial capabilities necessary for American economic and national security.

Glass in Pennsylvania and Texas

Glass production in the United States dates back to the Jamestown settlement, where from its early days it was considered a valuable export product back to Europe. Over centuries, glass evolved from a consumer and household product into a critical industrial material used in windows, containers, transportation applications, and eventually advanced manufacturing. As demand grew, production concentrated in Pennsylvania, Ohio, Indiana, and West Virginia.[85] Because glass manufacturing depends on high-quality sand with very low iron content and plentiful sources of energy, this geographic region was the primary area of concentration for U.S. glass production in the 20th century,[86] supported by abundant high-silica sand deposits and access to affordable energy. By the 1920s, facilities in West Virginia and Pennsylvania accounted for more than 40 percent of all glass production in the United States.[87]

Since the turn of the 21st century, U.S. glass production has declined and come under increasing pressure from global overcapacity.[88] In the last few years, however, global demand for glass has begun to rise quickly, driven by growth in the solar energy sector, infrastructure investments, and continued demand from building construction.[89]

GLOBAL MARKET CONDITIONS

Researchers and policy analysts have documented significant global overcapacity challenges in glass production, particularly those associated with Chinese industrial subsidies and state-supported capacity expansion.[90] China's glass sector received over $30 billion in subsidies from 2004 to 2008,[91] fueling rapid capacity expansion and export growth that exceeded underlying market demand.[92] As Chinese production surged following its WTO accession, U.S. glass imports more than tripled while domestic employment fell sharply from roughly 140,000 workers to 75,000.[93] These dynamics persist today. Domestic manufacturers continue to raise concerns

that Chinese-produced and -financed solar glass is benefiting from ongoing subsidies and entering global markets at prices that do not reflect market-based costs, creating challenges for competing producers operating under market conditions.

TIMELINE OF FEDERAL POLICY

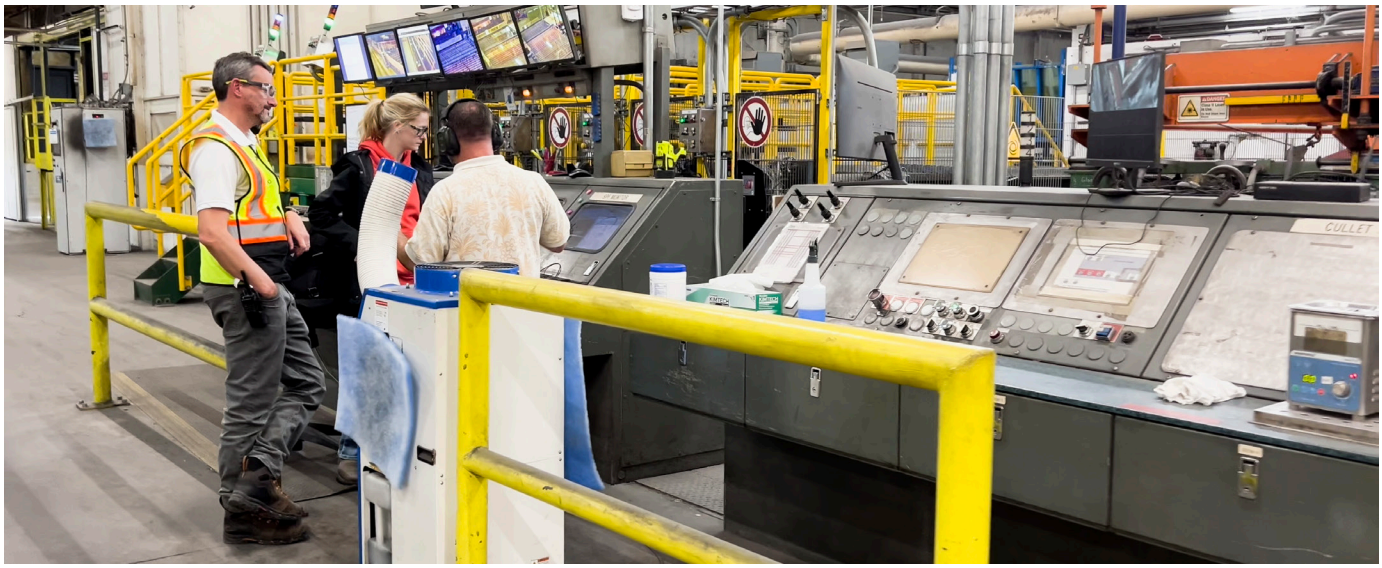
As concerns regarding global overcapacity and unfair trade practices have intensified, domestic manufacturers have increasingly turned to federal trade enforcement tools to level the playing field. While Section 301 tariffs on Chinese products offered some relief, for many manufacturers AD/CVD cases remain a critical tool to address specific overcapacity issues in their sector. For example, to counter Chinese dumping and subsidization of traditional float glass imports, Vitro Flat Glass LLC, headquartered in Cheswick, Pennsylvania, filed AD/CVD petitions in 2024 against producers in China and Malaysia.[94] In February 2026, Commerce issued final affirmative determinations, finding substantial dumping and subsidization, including triple-digit dumping margins for certain Chinese producers.[95] In March 2026, the ITC determined that Chinese float glass imports were materially injuring the domestic industry, resulting in the imposition of AD/CVD duties on China and CVD duties on Malaysia.[96]

RESULT FOR PRIVATE INDUSTRY

Vitro Flat Glass LLC represents the U.S. architectural and flat-glass business of Vitro, the largest glass producer in North America. Over time, Vitro has expanded its U.S. footprint across western and south-central Pennsylvania, with operations focused on serving the automotive sector and, more recently, the solar industry. Vitro, which began investing in U.S. glass production more than a decade ago, now serves as a key supplier to First Solar, the largest solar module manufacturer in the United States. First Solar's growth relies in part on trade enforcement to sustain a level playing field, and its commitment to domestic supply chains in the United States has enabled upstream suppliers, including glass producers, to simultaneously flourish.

During the COVID pandemic demand for Vitro's products declined, leading the company to make the difficult decision to idle a production line at an automotive-focused facility in Meadville, Pennsylvania, in 2020, laying off more than 100 workers.[97] The plant employed nearly 300 full-time workers in a rural community of roughly 13,000 people.[98]

As demand for solar energy grew, driven initially by market forces and later reinforced by the passage of the IRA, Vitro began receiving inquiries from North American PV module manufacturers seeking specialized glass inputs. However, traditional soda-lime glass production was not included among the industries eligible for key IRA production tax credits,[99] despite the limited domestic capacity for solar glass and the fact that glass is one of the most expensive inputs for solar energy manufacturing.[100] Recent affirmative determinations by Commerce and the ITC also confirmed that unfairly traded glass imports, particularly from China, had been dumped into the U.S. market and had materially harmed domestic industry.



Vitro in Meadville, PA



Vitro manufactures glass front sheets that are integrated into advanced thin-film photovoltaic (PV) solar panels.

In response to this demand, First Solar partnered with Vitro to restart the idled Meadville line. In a capital-intensive sector such as glass manufacturing, restarting a production line can require tens of millions of dollars in investment. With commercial support from First Solar, Vitro brought Meadville back online in 2025, rehiring many displaced workers and expanding production at its Carlisle, Pennsylvania, facility.[101] First Solar has committed significant commercial volume – reported at nearly $200 million[102] – to support Vitro's Pennsylvania operations. Together, these facilities are now operating at or near full capacity, supplying glass for domestic solar production.

Despite these gains, structural gaps in U.S. trade enforcement remain. While AD/CVD enforcement helped address unfairly traded imports in traditional float glass, the vast majority of cases require a showing of material injury or threat of material injury to an existing domestic industry.[103] Investigations based on the material retardation of a new industry are rare and infrequently used.[104] As a result, current law can be less effective for firms seeking to make new investments in new or adjacent product segments already affected by unfair trade. In practical terms, companies face significant barriers to securing relief in markets where domestic production has not yet been established at scale.

Vitro had previously announced plans to invest in new solar glass production in Wichita Falls, Texas, with the potential for future expansion supporting hundreds of jobs within three years.[105] Given its existing footprint in the region and the concentration of U.S. solar manufacturing in Texas, the project was well-positioned to serve growing domestic demand. However, ongoing pressure from unfairly traded imports and uncertainty in the domestic policy environment called the project's viability into question. Vitro believes that, under current conditions, additional expansion may not generate sufficient demand to justify the investment.[106]

Absent reforms that more clearly allow AD/CVD cases to address prospective investment and threat-based harm in emerging segments, firms like Vitro may be unable to move forward with projects of this scale. As a result, current trade law may inadvertently discourage the very domestic investment it is intended to protect. If Vitro had a current facility making this product, it could demonstrate injury, and Vitro believes that AD/CVD laws should be reformed to reflect this need in the market for prospective investments.

Small Businesses in Oregon, West Virginia, and Illinois

The following case studies examine three small businesses located in different regions of the country and operating in distinct industries and markets. Each has confronted sustained competitive pressures driven by global overcapacity, dumping, and trade circumvention, and each has adapted in different ways. Taken together, these examples demonstrate how global market distortions affect small manufacturers and illustrate the need for strong trade enforcement tools, strategic tariff policies, and broader policy initiatives that help restore fair competition for U.S. producers of all sizes.

SUSTAINABLE MANUFACTURING IN OREGON

When American manufacturers can compete on a level playing field with foreign producers, small manufacturers can thrive. Cycle Dog, a Pacific Northwest-based company, produces pet products such as leashes, beds, and plush toys using locally sourced, sustainable, and recycled materials. All production occurs at its Portland, Oregon, facility, where Cycle Dog employs approximately 30 workers, many of whom have been with the company for years.

Employee wages exceed local minimum wage requirements, reflecting the company's commitment to high-road employment practices. Customers frequently receive direct responses from owner Lanette Fidrych





(Top) Arturo Sandoval is a Marine Corps veteran who has advanced from a sewist to the production lead at Cycle Dog's factory in Portland, Oregon. (Bottom) Cycle Dog owner Lanette Fidrych founded the pet product company in 2009, manufacturing leashes, beds, and plush toys from sustainable and recycled materials. To date, Cycle Dog has reclaimed more than two million bicycle inner tubes through its manufacturing.

who, due to the company's complete oversight of its production process, can verify that all inputs are sourced domestically and are non-toxic. Over the past 17 years, Cycle Dog has diverted millions of inner tubes and plastic bottles from landfills.

In the pet products sector, retailers have long relied on low-cost imports in what has become a highly disposable market. These imports are often priced at levels that appear inconsistent with the underlying cost of materials, reflecting broader global market distortions. Recent trade measures, including tariffs on imports, have helped restore some balance. During the COVID-19 pandemic, skyrocketing shipping costs increased the price of imported goods, while tariffs further narrowed the price gap between domestic and foreign products.

Together, these factors improved the competitiveness of domestic production on both price and supply chain reliability. After more than a decade of unsuccessfully approaching major retailers, Cycle Dog began receiving inbound inquiries as major retailers sought more stable domestic suppliers. For Fidrych, the experience demonstrates that even modest shifts in trade policy and sourcing decisions can meaningfully affect the competitiveness of small domestic manufacturers. Fidrych would support a more strategic tariff framework that targets unfair competition in finished goods markets while advancing policies to address gaps in domestic supply chains and ensure U.S. manufacturers can source critical inputs without facing structural disadvantages.

FURNITURE PRODUCTION IN WEST VIRGINIA

U.S. furniture manufacturing is among the industries most severely impacted by import shocks over the past several decades. Gat Caperton purchased a furniture factory in West Virginia more than 30 years



Dr. Carolina Ferrerosa Young speaks with Sean, a builder at Gat Creek in Berkeley Springs, West Virginia Since beginning work at the factory nine months ago, he has rented his own apartment and begun establishing his family. Sean, who is also a veteran, is now looking forward to the birth of his first child.



Gat Creek harvests its raw materials from Appalachian forests within a day's drive from its factory. Scrap wood is used to heat the facility.

ago when roughly 90 percent of furniture sold in the United States was produced domestically. The market changed dramatically, however, following China's 2001 WTO accession. Import penetration increased sharply, and a substantial share of U.S. furniture manufacturing capacity was lost as domestic furniture producers closed operations.

Products once affordable for middle-class families are increasingly sourced from overseas manufacturers.

For years, Caperton understood that imported Chinese furniture was consistently priced below the cost of production. In response, his company, Gat Creek, joined a coalition of domestic furniture manufacturers in 2003 to file an AD petition covering imported wooden bedroom furniture.[107] Following investigations by Commerce and the ITC, affirmative determinations were issued in 2004, finding that Chinese producers were dumping wooden bedroom furniture in the U.S. market and benefiting from subsidies, and that these imports materially injured domestic industry.

Still, Caperton notes that AD/CVD remedies are inherently product-specific and can be circumvented. While Section 301 tariffs imposed during the first Trump administration provided broader relief, similar products began entering the U.S. market from third countries, particularly Vietnam, after duties were imposed on Chinese products. Caperton views this as evidence that foreign producers adapt to trade enforcement by relocating production and supply chains while continuing to target the U.S. market. He believes stronger enforcement tools are needed to address this behavior, including higher duties and more effective anti-circumvention measures where appropriate.

Even with trade relief, Caperton was forced to alter his business model. Competing in the low- and mid-priced segments became untenable due to persistent import pressure. While AD orders slowed the surge of imports and provided temporary relief, long-term structural challenges remained. Gat Creek ultimately shifted to a premium market strategy, serving a smaller, higher-income customer base. Although the business has since increased revenue and expanded employment by approximately 40 workers, this transition reflects a broader hollowing out of the middle of the U.S. manufacturing market. Products once affordable for middle-class families are increasingly sourced from overseas manufacturers. For future production, Caperton would like to see stronger enforcement against unfair trade practices and trade circumvention to curtail this longstanding problem.

AUTOMOTIVE PARTS IN ILLINOIS

Over the past several decades, significant portions of the U.S. automotive parts sector have closed operations or consolidated in response to import competition, particularly from China. Since 2017, Plews & Edelmann, a U.S. manufacturer, has competed directly with Chinese manufacturer Qingdao Sunsong in the power steering hose aftermarket. Plews estimates that Sunsong has captured approximately 50 percent of the U.S. market, driven by pricing that it believes is below the cost of production. In addition, Plews points to potential tariff evasion beginning in 2020, suspecting that Chinese-origin products were being routed through Thailand to avoid Section 301 duties.

In mid-2021, Plews filed a False Claims Act submission with the U.S. Department of Justice (DOJ), submitted a CBP e-Allegation, and sought assistance from DOJ's Trade Fraud Task Force. Despite these efforts, the case remains under investigation and no enforcement action has been taken that has materially altered Plews' competitive position.

Plews reports substantial economic harm linked to these practices, including the loss of key customers, more than $25 million in lost revenue, a 20 percent reduction in prices, and an inability to pass through rising domestic input costs. The company has also faced liquidity pressures, governance disruption, and two divestitures; eliminated approximately 100 jobs and shuttered a domestic production facility; incurred more than $1 million in investigative costs; and reduced R&D investment.

From Plews' perspective, delayed and insufficient federal enforcement allowed unfair trade practices to persist for years. This case highlights the need for stronger and more timely enforcement mechanisms. A statute such as the proposed Fighting Trade Cheats Act, which would provide injured domestic producers with a private right of action, could help address enforcement gaps and restore fair competition more quickly. Another policy proposal, such as the Protecting American Industry and Labor Act, which would set up and fund a dedicated Trade Fraud Task Force inside the DOJ's criminal division, could create a helpful parallel enforcement track to address allegations of customs fraud, tariff evasion, and transshipment more rapidly.

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Unlike many traditional trade cases, the Plews experience illustrates that identifying potential trade fraud is often only the first step; timely enforcement is equally important if domestic producers are to obtain meaningful relief before significant market share, jobs, and investment are lost.

Policy Recommendations

Correcting Global Trade Imbalances

Unfair trade is not solely an economic concern; it can also create vulnerabilities for national security. When persistent market distortions, foreign subsidies, and import dependence erode domestic production capacity in strategically important industries, they can also weaken national security and critical supply chains. Many domestic industrial producers have the capacity to produce material both for commercial and military purposes. A modern trade enforcement framework must therefore protect both the economic security of American workers and manufacturers and the industrial capabilities necessary for the nation's security.

In recent decades, the United States has taken a lax approach to global trade imbalances and the relative regulatory disparities between the United States and other countries for American producers. The U.S. entered into free trade agreements under the assumptions that they would create well-paying jobs for Americans and serve as a net positive overall for the American economy. Presidents of both parties argued in favor of the United States entering these kinds of economic agreements with other countries. Yet, too many of these agreements were negotiated around aggregate economic gains without understanding impacts for local labor markets. Since enactment of these agreements, research has found that free trade agreements, particularly with low-wage countries, place American production on unequal footing with other countries by exacerbating a loss of production and manufacturing jobs for American workers in favor of service-based job creation. The situation for American producers deteriorates further when large economies engage in non-market unfair trade practices without adequate global or domestic enforcement. Global trade organizations and institutions seem committed to creating rules and regulations for trade, but less focused on enforcing them or dealing with the non-market approach of countries like China. American producers gain little letting the status quo stand.

The United States needs to work toward creating marketplaces that reward production that is consistent with market fundamentals and meets U.S.-based standards if it intends for American companies and workers to compete fairly in the global marketplace. There should be an inherent benefit in making a product with highly paid or union-represented labor while adhering to some of the strongest environmental protections in the world, beyond the inherent risk of production in deregulated environments.

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The same principle should apply to labor rights. The American labor market has a long history with union membership and density, particularly in industrial sectors. Labor unions have long been associated with improvements in strengthening the American middle class and improving working conditions in the United States.[108] Given longstanding policy efforts to ensure and protect freedom of association for American workers,[109] trade policy should not work to undermine American job security and wages. In other words, America's workers and manufacturers should not be forced to compete against production that derives a cost advantage from the suppression of wages, freedom of association, collective bargaining rights, or basic workplace protections. Significant disparities in labor standards and their enforcement should therefore be considered as the United States develops policies to address structural imbalances in global trade.

Accordingly, policymakers should strengthen rules and enforcement to protect high-road producers from global competitors that use unfair practices to gain market share.

Leveling the Playing Field 2.0

AD/CVD laws exist as one of the major tools used to shield American companies and workers from global unfair trade practices. As covered in the earlier part of the report, however, existing U.S. AD/CVD laws have not been updated since 2015. Since then, new research and information has identified a surge in unfair trade practices, primarily initiated by China with expanding impacts on global markets, meant to ensure increasing Chinese market dominance of commodities and products. Because American producers, manufacturers, and the workers in these industries often rely heavily on AD/CVD laws for relief from these practices, they must be constantly updated to keep up with the methods and strategies other countries use to tip the scales in favor of their domestic industries.

In 2023, Senators Sherrod Brown (D-Ohio) and Todd Young (R-Ind.) introduced the Leveling the Playing Field 2.0 Act, a bill to update the nation's antidumping and countervailing duty laws to defend American companies from continued global unfair trade practices. To address some of the current problems with AD/CVD laws, like requiring companies to initiate a new case every time there is a new instance of trade circumvention, the bill would establish in law the concept of "successive investigations," which would make it easier for companies to continue addressing illegal subsidization and dumping every time it moves from one country to another. The bill would also expedite timelines and give the Department of Commerce the authority to apply CVD laws to subsidies from countries other than the one where production is occurring.

In 2025, Reps. Beth Van Duyne (R-Texas) and Terri Sewell (D-Ala.), and Sens. Todd Young (R-Ind.) and Tina Smith (D-Minn.), led the bipartisan, bicameral introduction of the Leveling the Playing Field 2.0 Act (H.R. 1548/S. 691).

Fighting Trade Cheats Act

Beyond dumping and subsidization, some global producers bank on lax enforcement and engage in direct trade fraud. The Fighting Trade Cheats Act (FTCA) is a bill to improve the Customs penalty statute to better deter acts of customs fraud, including efforts to obscure the true origin of imported products through transshipment. Transshipment schemes and other forms of trade fraud undermine U.S. trade laws by evading AD/CVD orders and perpetuating harm to U.S. manufacturers, their workers, and suppliers.

The FTCA would increase penalties for willful customs violations, suspend importer authorizations for bad actors, and afford impacted U.S. industries with legal standing to more rapidly challenge fraud in product importation. These reforms would strengthen the enforcement of existing trade remedies by creating more meaningful consequences for importers that deliberately evade U.S. trade laws.

The bipartisan, bicameral Fighting Trade Cheats Act was reintroduced in the 119th Congress. Reps. Mike Bost (R-Ill.) and Terri Sewell (D-Ala.) lead the House legislation (H.R. 1284), while Sens. Katie Britt (R-Ala.), Tammy Baldwin (D-Wis.), Thom Tillis (R-N.C.), and John Fetterman (D-Pa.) introduced the Senate bill (S. 3808).

Strengthening Federal Trade Enforcement Capacity

Strong trade laws are only effective if the federal government has sufficient capacity to enforce them. U.S. Customs and Border Protection (CBP) is responsible for enforcing and collecting duties on imports subject to a wide range of trade measures, including antidumping and countervailing duties and tariffs imposed under Sections 232 and 301. Yet the scale and sophistication of customs fraud, transshipment, misclassification, undervaluation, false country-of-origin claims, and other duty-evasion schemes place significant demands on federal enforcement resources.

Effective enforcement also depends on CBP having sufficient visibility into increasingly complex global supply chains. Efforts to strengthen import disclosures, supply chain tracing, documentation requirements, and transparency regarding parties involved in import transactions are an increasingly important component of customs enforcement. Better supply chain information can help CBP identify suspicious trade patterns, verify the origin of imported merchandise, and detect illegal transshipment and other duty-evasion schemes.

Congress should complement these modernization efforts by providing CBP with the personnel, investigative resources, data capabilities, and enforcement tools necessary to analyze this information, identify duty evasion, investigate suspicious trade patterns, and collect duties legally owed on imported merchandise.

Adequate resources are equally important for the Department of Commerce's administration of AD/

CVD laws. Congress cannot expect trade remedies to become faster and more responsive while the agencies responsible for administering them lack sufficient capacity. Commerce should have the personnel, technical expertise, and investigative resources necessary to conduct AD/CVD investigations and administrative reviews, enforce existing orders, and respond quickly to circumvention and increasingly complex subsidy and production arrangements. Providing sufficient resources for these responsibilities should accompany legislative efforts to strengthen and modernize U.S. trade remedy laws.

Prospective Trade Defense

Along with the needed changes that Leveling the Playing Field 2.0 Act and Fighting Trade Cheats Act can offer in the form of updates to existing AD/CVD law and a new private right of action in collaboration with the federal government, American companies and workers need trade tools that tackle unfair trade practices prospectively. Under the current structure of trade enforcement laws, petitioners must demonstrate significant financial loss for nearly a year before they have grounds to apply for an investigation and an adjudication for relief. What's more, it can take an average of 14 months for duties to be applied after the initial application, while the company and its workers continue to confront the reality of unfair trade practices undercutting its profitability. Companies will sometimes lay off workers while these cases are under investigation, adding to the local economic harm of these illegal actions. Finally, current AD/CVD cases are also expensive, often costing companies millions of dollars, particularly in legal fees for each case. As a result of all these factors, AD/CVD cases tend to be a form of relief sought by already large companies, and small businesses often do not have the operational capital to initiate these kinds of cases.

Congress should examine ways to reduce the financial and procedural barriers that prevent small and medium-sized manufacturers from effectively accessing AD/CVD remedies, ensuring that the ability to enforce U.S. trade laws does not depend on the size or financial resources of the injured domestic producer. Policymakers should also lower the threshold for American workers and their representatives to bring AD/CVD petitions. Existing industry support requirements can create a significant burden for worker representatives seeking to initiate a case, limiting workers' practical ability to use trade remedies when unfairly traded imports threaten domestic production and employment. Congress should reform these requirements so that workers have meaningful access to the same trade enforcement tools intended to protect the industries in which they work.

American industrial production cannot keep being subjected to these attacks without accessible and effective tools to address the multitude of threats posed by foreign producers and their governments. Sweeping presidential action on tariffs is often welcome in these industries because the current structure of the system and the existing tools leave companies with few good options. The U.S. government should not be asking American companies to incur the financial loss of global non-market actions – it should, instead, be devising tools to get ahead of these actions.

Policymakers should consider developing a new type of AD/CVD investigation that initiates a fact-finding analysis based on data available on global production monopolies and claims made by companies and workers directly. Often private companies have the internal data and information on global market conditions to understand when and how to make investments in a globally competitive market. The information needed to determine unfair market practices, particularly in instances of dumping of undervalued products, can be uncovered well in advance to limit the financial harm for American companies before it is inflicted. Additionally, a fast-tracked process should exist for investigating and assessing preliminary duties on foreign exporters and their affiliates that have been assessed duties in more than one AD/CVD investigation and have been found to benefit from cross-border subsidies. The federal government should actively investigate these actions by adversarial foreign actors to avoid layoffs and idling of U.S. factories.

Continued Dumping and Subsidy Offset Act (CDSOA)

The Continued Dumping and Subsidy Offset Act (CDSOA) was a provision of AD/CVD law that allowed for duties collected by CBP to be disbursed to the injured domestic producers. The provision was enacted in 2000 and repealed in 2006, with the repeal taking effect in 2007. Certain distributions continued for entries made before the repeal became effective.

While injured domestic producers can currently experience relief from foreign dumping and subsidies

through higher relative costs for foreign goods production within the American market, they are not often made whole from the financial loss incurred from these practices until a longer time period has passed. In a context where workers are often laid off as a result of these unfair trade actions, the American government should revive this provision of AD/CVD law to make domestic producers and workers whole on a much faster timeline. This will allow companies to invest in plant, equipment, and people using the revenue from the tariffs that are imposed on law-breaking actors.

Investments in Strategic Industries

Industries that produce tangible goods are, by definition, capital-intensive industries. They often require machines, physical locations, highly skilled labor, and any of the numerous variables that translate into making and creating goods. Under these conditions, particularly in times of high interest rates, investments in American production often need additional incentives to counteract the pressures of global and domestic outsourcing, automation, and hyper financialization. Strategic federal investments leverage significant additional private sector investment in domestic manufacturing.

This was the rationale for the series of legislative investments made in the 117th Congress, including the CHIPS and Science Act and the IRA, which both presented a mix of tax credits along with loans and grants to strategic industries in a range of production from clean energy to critical minerals to semiconductors. The kinds of investments included in these bills – like the 45X Advanced Manufacturing Production Tax Credit and energy transformation grants made available by DOE – opened the floodgates to increasing investments in American manufacturing and production. The American economy was on a trajectory of doubling factory construction spending for the first time in decades.

American companies, however, cannot operate in a climate of uncertainty and volatility. For many companies, these benefits are poised to sunset. If the American government is serious about investing in American production, these kinds of investments must have lasting durability. What's more, the United States should consider expanding tax credits for union-represented production and production that uses cleaner forms of energy relative to competitors.

Weak Domestic Trade Defense Limits Foreign Direct Investment

Companies from around the world operate in the same global marketplace that American companies do. They have to make the same decisions on where to invest in production as American companies. While American companies may already have the long-lasting footprint, local relationships, or even allegiance to the communities that initially made the company successful, foreign producers may not have any of these variables in place when they consider where to invest around the world. Simply put: Too many foreign producers cannot make credible arguments to their boards in favor of investments in American-based production if they believe those investments will be undercut by foreign unfair trade practices on American soil. Just as companies choose to invest in American production and charter their companies here to gain access to the legal protections afforded intellectual property in one of the strongest judicial systems in the world, foreign companies must be able to see that the United States takes American-made production seriously with strong trade enforcement laws.

In other words, weak or uncertain trade enforcement can deter high-quality investment in U.S. production. Strong and durable enforcement, paired with appropriate domestic content expectations and safeguards against circumvention, can make the United States more attractive for investments that create substantial domestic capacity, supply chain activity, and good jobs.

Accounting for Environmental Regulatory Disparities in Trade

America's manufacturers operate under one of the most stringent regulatory regimes around the world, with environmental standards designed to protect air and water quality, workers, communities, and the environment. Compliance with these requirements represents a real cost of doing business in the United States relative to other countries. Foreign producers operating under substantially weaker environmental standards, or in jurisdictions where comparable standards are poorly enforced, can consequently gain an artificial cost advantage over U.S. producers that meet higher domestic requirements.

These environmental disparities can also impose costs directly on the United States. The Bipartisan Policy Center estimates that particulate matter pollution produced abroad causes approximately 8,000 premature deaths and more than $60 billion in U.S. health care costs annually. The organization also found that foreign pollution has contributed to air-quality nonattainment designations in at least 85 U.S. counties, potentially restricting industrial permitting and manufacturing activity. Foreign pollution can therefore create a double disadvantage for the United States: American manufacturers bear the costs of complying with stronger domestic environmental standards while pollution generated abroad imposes additional health and economic costs on American communities, further constraining domestic production.[110]

U.S. trade policy should better account for these differences. Environmental disparities extend beyond carbon emissions and can include differences in air and water pollution controls, waste management requirements, energy sources, and the cost and enforcement of other environmental protections. The United States should develop stronger mechanisms for measuring these regulatory disparities and consider applying tariffs or other adjustments to imported products manufactured under standards substantially weaker than those applicable to competing U.S. production.

Any such mechanism should complement, rather than replace, existing trade enforcement authorities. Environmental performance alone should not exempt an imported product from applicable antidumping and countervailing duties, Section 232 or Section 301 measures, customs enforcement, forced labor restrictions, or other measures addressing subsidies, excess capacity, and non-market practices. A foreign producer may operate a comparatively clean facility while still benefiting from substantial government subsidies or other policies that unfairly disadvantage U.S. production.

The United States can preserve the quality of its environment and its industrial base rather than forcing American manufacturers and workers into a race to the bottom.

Protecting American Industry and Labor from International Trade Crimes Act

Current customs laws provide civil and criminal tools to address fraud, duty evasion, transshipment, smuggling, false statements, and other violations of U.S. trade law. They are not, however, supported by a sufficiently resourced and dedicated prosecutorial structure within the Department of Justice to ensure that serious trade crimes are investigated, prosecuted, and punished with the urgency and consistency required to deter violators.

In 2025, Reps. Ashley Hinson (R-Iowa), Raja Krishnamoorthi (D-Ill.), John Moolenaar (R-Mich.), and other bipartisan lawmakers reintroduced the Protecting American Industry and Labor from International Trade Crimes Act (H.R. 1869), legislation to establish a dedicated task force or similar structure within DOJ's Criminal Division to investigate and prosecute trade-related crimes. The bill would strengthen nationwide enforcement by supporting training and technical assistance for federal, state, and local law enforcement agencies, expanding investigations and prosecutions, and allowing for parallel criminal and civil enforcement actions. It would also require the U.S. Attorney General to submit an annual report to Congress assessing DOJ's trade-crime enforcement efforts, statistics on trade-related crimes, and use of funds, while authorizing dedicated funding to support these efforts.

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Author's Note

Now that the dust has settled on the midterm election, it's clear we will have new majorities in Congress itching to deliver change. One policy area they will tackle is what to do about President Trump's tariffs and trade enforcement policy.

But, from my experience in both the U.S. Senate and the White House, few policymakers and staff understand trade enforcement policy, its history, present day use, or why both the Trump and Biden administrations used executive authority to increase tariffs. By now, many are familiar with the "China Shock" concept: groundbreaking research showing that places in which jobs were offshored to China took a decade or more to recover, if they recovered at all. Most miss the other equally relevant finding in that research: loss of economic opportunity makes voters more likely to turn to ideological extremism. Absent spending a lot of time in manufacturing communities or working for a member of Congress that represents these areas, it is hard to understand what these communities have gone through over several decades or why the past two U.S. presidents supported dramatic shifts on tariffs and trade.

I include myself in that critique. My own views as a political scientist focused on economic inequality and as a native Virginian changed when I started working for a Midwestern Senator. When I was newly covering the economic portfolio for U.S. Senator Sherrod Brown and asked our state director to send me a list of places in Ohio that saw factory closures, he shocked me with: "We can't find a small, medium, or large city in Ohio that hasn't seen production go overseas to Mexico or China."

When a factory leaves a town in America, workers lose their livelihoods and employer-sponsored benefits; but, there are other impacts too. Usually, the local small businesses relying on those customers fold. Houses become difficult if not impossible to sell. Schools lose revenue to provide basic services. Married couples are more likely to divorce. The economic destruction ripples through the fabric of a community, creating entrenched despair.

Local issues then impact the broader state of economic mobility in the United States. Despite having a labor market primarily composed of people without college degrees, free trade largely benefited college-educated workers while doing nothing to make college more affordable. There is no evidence unfettered free trade created more American jobs than the millions we lost in manufacturing. Offshoring decisions also targeted union dense sectors, reducing union density and collapsing the union wages that put upward pressure on the labor market to increase wages for all American workers.

The problem for the new Congress is that these issues are not new, yet run in tandem with other shifts in the economy and present-day circumstances. For many manufacturing communities, this economic loss was the foundation on which they experienced the financial crisis, corporations switching to lower paid contractors for jobs that used to be done in house, the collapse of economic mobility for workers without a college degree, present day rising inflation, ballooning credit card debt, housing costs, childcare costs, and higher education costs, to name a few.

I would argue this blindspot on trade policy and its impact for domestic manufacturers and workers also defined the conversation around economic power in recent presidential politics. There is a reason President Trump campaigned against NAFTA and liberalized trade with China in 2016 and won three Midwestern states where many jobs were concentrated. There is a reason President Biden campaigned on a 'Made in America' economic platform to reduce our reliance on foreign goods, increase domestic production, and revitalize American manufacturing, while pledging to avoid international trade agreements until large investments had been made in the middle class. President Trump continued to highlight these issues in 2024, winning those same states. For many working families that saw factories go overseas for decades on end with no action from Washington, someone was finally fighting for them. Understanding the history of trade enforcement policy, its impact for manufacturing communities, and the way these areas are often concentrated in Midwestern states will be critical to a road to the White House in 2028.

This report for the Alliance for American Manufacturing tries to help broaden bipartisan understanding by offering a window into this policy area. It sheds some light on the history of trade enforcement policy,

uses case studies and site visits to demonstrate how manufacturers have used these policy tools over time, and underscores the work that needs to be done to support domestic producers in the face of unfettered unfair trade practices in the global marketplace. It is an area of the economy often poorly understood by macroeconomists, but critical to understanding the economy and our present-day politics. I urge the new Congress to not leave these workers and producers behind in the conversations ahead.

ABOUT THE AUTHOR



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