



TWO YEARS OF BUILDING STRONGER SUPPLY CHAINS AND A MORE RESILIENT ECONOMY

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Report Card: Two Years of Building Stronger Supply Chains and a More Resilient Economy

The COVID-19 pandemic and resulting economic crisis significantly disrupted supply chains around the world, forcing many families to navigate empty store shelves, endure longer delivery times, and pay higher prices at the register. Supply chain bottlenecks for critical inputs, like semiconductors, exposed major U.S. economic and national security vulnerabilities, many of which were decades in the making. Pandemic-induced disruptions were exacerbated by Russia's unjust invasion of Ukraine, which further highlighted the dangers of overreliance on geographically concentrated production and far-flung, fragile supply chains. Together, the pandemic and the war contributed to a surge in input costs and inflation across many sectors of the economy.

The Biden-Harris Administration made supply chain resilience and response a top priority on day one, collaborating with industry and labor to address acute shortages and bottlenecks throughout the economy. As a result, critical supply chains are significantly more fluid and resilient than they were when the President took office. Today, we see increased access to transportation and warehousing capacity and equipment, solid throughput at the ports, improved delivery times, greater ocean shipping reliability, and steady declines in transportation costs.

- The nation's ports moved record levels of cargo in 2021 (25.8 million units) and 2022 (25.5 million units) through increased collaboration across the logistics industry, which has helped reduce the significant backlog of anchored vessels from a peak of 155 to roughly a dozen in May 2023.
- 92 percent of goods at grocery and drug stores are in stock—above where they were pre-pandemic.
- There are over 120 new trucking firms with Registered Apprenticeship programs to help attract, train, and retain talent in this critical sector.
- The New York Fed's Global Supply Chain Pressure Index has eased off of its highest level on record. This has happened alongside a historic surge in East-West ocean shipping prices, which have fallen by roughly 90 percent since their peak in September 2021, as well as a 30 percent drop in gas prices since their summer 2022 peak. Moreover, annual core goods inflation has fallen more than 65 percent since its peak in February 2022.

Today, the White House Council of Economic Advisers [released a blog](#) demonstrating that the normalization of supply chains appears to be driving down prices for goods, lowering inflation for families, consumers, and businesses.



Even with this success, President Biden has long recognized that building strong supply chains requires not just solving acute crises but making long-term investments in resilience. In his first months in office, President Biden signed Executive Order (E.O.) 14017, “America’s Supply Chains,” directing the federal government to undertake a first-of-its-kind comprehensive 100-day review of the supply chains of four critical products – semiconductors, large capacity batteries, critical minerals and materials, and pharmaceuticals and active pharmaceutical ingredients – to identify vulnerabilities, assess risks, and develop strategies to promote resilience.

To undertake this comprehensive review, the Biden Administration established an internal task force spanning more than a dozen agencies, consulting with hundreds of stakeholders from labor, business, academic institutions, Congress, and U.S. allies and partners to identify vulnerabilities and solutions for these supply chains. The [100-day review](#) was released on June 8, 2021.

Two years later, significant progress has been made in implementing the 100-day review’s findings. More than 70 recommendations across the report have been completed to date – from providing financing across the full battery supply chain to leveraging the Defense Production Act in historic ways to diversifying supply chains by supporting small- and medium-sized businesses. Spurred by President Biden’s Investing in America agenda, the private sector has invested over [\\$470 billion](#) in manufacturing of semiconductors, electric vehicles (EVs) and EV batteries, clean energy technologies, and pharmaceutical and medical products.

The following report card lays out actions taken across more than two dozen of the most significant cross-cutting recommendations in the 100-day review, strengthening critical supply chains while creating good-paying, union jobs, and bolstering our industrial base and domestic manufacturing capacity.



Recommendation I: Rebuild Production and Innovation Capabilities

June 2021 Recommendation:	As of June 2023:
<p>Provide dedicated funding for semiconductor manufacturing and Research and Development (R&D).</p>	<ul style="list-style-type: none">✓ The CHIPS and Science Act was signed into law by President Biden on August 2022 with an appropriation of \$52.7 billion. This appropriation includes \$39 billion in manufacturing incentives, \$13.2 billion in R&D and workforce development, and \$500 million to secure international information communications technology and strengthen the semiconductor supply chain. It also provides a 25% investment tax credit for capital expenses for manufacturing of semiconductors and related equipment.✓ The Department of Commerce released its first notice of funding opportunity in February 2023 for manufacturing incentives.✓ The creation of the National Semiconductor Technology Center, a public-private consortium focused on semiconductor R&D commercialization, is well underway.
<p>Provide consumer rebates and tax incentives to spur consumer adoption of EVs.</p>	<ul style="list-style-type: none">✓ The Inflation Reduction Act enacted a consumer tax credit for passenger vehicles of up to \$7,500 for new EV purchases (30D) and a consumer tax credit of up to \$4,000 for used EV purchases (25E).✓ On March 31, 2023, Treasury proposed updated rules for the consumer clean vehicle tax credit to ensure that qualifying vehicles use critical minerals mined or processed in the U.S. or a partner country and batteries manufactured in North America.✓ The Bipartisan Infrastructure Law provided \$7.5 billion to build out a Made-in-America national network of EV chargers. The Department of Transportation released detailed standards for the



	<p>National Electric Vehicle Infrastructure Program in February 2023.</p>
<p>Provide financing across the full battery supply chain.</p>	<ul style="list-style-type: none"> ✓ The Bipartisan Infrastructure Law appropriated nearly \$7 billion to strengthen the U.S. battery supply chain, and the Inflation Reduction Act provided further production incentives for the battery supply chain, from materials processing to battery manufacturing. ✓ In February 2022, the Department of Energy announced \$3 billion to invest in the full battery supply chain, which includes battery materials refining and production plants, battery cell and pack manufacturing facilities, and recycling facilities. ✓ The Department of Energy Loan Programs Office has made more than \$5 billion in conditional commitments for battery supply chain projects, from lithium processing to battery recycling.
<p>Establish a new Supply Chain Resilience Program.</p>	<ul style="list-style-type: none"> ✓ The Bipartisan Infrastructure Law established a new Office of Multimodal Freight Infrastructure and Policy at the Department of Transportation to coordinate national freight investment activities and provide support to cities and states. ✓ Commerce’s International Trade Administration secured an initial \$10.8 million appropriation to launch a first-of-its-kind dedicate supply chain resiliency team that is piloting proactive, strategic analyses of critical supply chains. However, there is still need for a more permanent Commerce program, which is why the agency continues to prioritize its supply chain resilience proposal in the appropriations process. ✓ In June 2023, the Hollings Manufacturing Extension Partnership (MEP), a program of Commerce’s National Institute of Standards and Technology (NIST), established a national Supply Chain Optimization and Intelligence Network (SCOIN) to help small and medium-sized manufacturers across the country fill domestic supply chain gaps. ✓ The Department of Health and Human Services announced a new dedicated public health industrial base expansion and supply chain management office, and the Department of



	<p>Energy established a new Manufacturing and Energy Supply Chains Office.</p>
<p>Deploy the Defense Production Act (DPA) to expand production capacity in critical industries.</p>	<ul style="list-style-type: none"> ✓ In March 2022, President Biden issued a historic Presidential Determination for DPA Title III to expand production and mining of critical minerals for EV and stationary storage batteries. ✓ In June 2022, President Biden authorized the use of the DPA to accelerate domestic production of clean energy technologies – essential for lowering energy costs for families, reducing risks to the power grid, and fighting climate change. ✓ The Inflation Reduction Act provided \$500 million in Defense Production Act funding for critical battery materials and heat pumps.
<p>Invest in the development of next generation batteries.</p>	<ul style="list-style-type: none"> ✓ In January 2023, the Department of Energy announced \$125 million for its Batteries and Energy Storage Energy Innovation Hub program. This program will fund foundational research needed to take advantage of a variety of advanced battery chemistries and technologies, decreasing dependence on lithium-ion and lead acid batteries.
<p>Invest in the development of new pharmaceutical manufacturing and processes.</p>	<ul style="list-style-type: none"> ✓ The Department of Health and Human Services has invested over \$500 million toward the developing innovative domestic manufacturing for active pharmaceutical ingredients. ✓ The Department of Health and Human Services is investing \$40 million to expand the role of biomanufacturing for active pharmaceutical ingredients, antibiotics, and industrially relevant key starting materials needed to produce essential medications and to rapidly respond to pandemic threats. ✓ The National Science Foundation’s Regional Innovation Engines program has invested in development for bioengineering, including the manufacturing of life-saving medicines. ✓ The Economic Development Administration’s \$1 billion Build Back Better Regional Challenge invested more than \$200 million to expand the bioeconomy by advancing regional biotechnology and biomanufacturing programs.



<p>Work with industry and labor to create pathways to quality jobs, with a free and fair choice to join a union, through sector-based community college partnerships, apprenticeships, and on-the-job training.</p>	<ul style="list-style-type: none">✓ In June 2022, the Administration and coordinating agencies launched the Talent Pipeline Challenge to expand workforce development in broadband, construction, and electrification. The Challenge convened employers, training providers, and governments to collaborate to support equitable workforce development. Commitments were made by more than 350 organizations across all 50 states.✓ The Administration has made a range of investments to rapidly scale and expand Registered Apprenticeships in critical sectors, including trucking.✓ The Department of Commerce awarded \$500 million to 32 coalitions through the Good Jobs Challenge to support high-quality, locally led workforce systems.✓ On May 16, 2023, the Administration released its Roadmap to Support Good Jobs for the President’s Investing in America agenda, announced an Advanced Manufacturing Sprint, and five Workforce Hubs to serve as models for government, labor, employer, and community collaboration to promote high-quality workforce training to meet local needs.✓ New federal minimum standards released in February 2023 require that all electricians installing, operating, or maintaining EV chargers have a certification from the union-backed Electric Vehicle Infrastructure Training Program (EVITP) or have completed a registered apprenticeship program.✓ Many of the Inflation Reduction Act’s tax credits for building clean energy projects include bonus credits for paying prevailing wages and utilizing registered apprentices. In November 2022, Treasury and the IRS released initial guidance to put those provisions into effect.
<p>Support small, medium, and disadvantaged businesses to help diversify critical supply chains.</p>	<ul style="list-style-type: none">✓ The American Rescue Plan’s State Small Business Credit Initiative has so far supported small manufacturers through more than 2,500 loans and investments representing one-fourth of the \$10 billion in financing spurred by the program.



	<ul style="list-style-type: none">✓ In May 2022, the White House launched AM Forward, a voluntary compact between large manufacturers and their smaller U.S.-based suppliers to support adoption of new additive manufacturing capabilities.✓ Companies’ commitments to utilizing small and medium-sized enterprises (SMEs) and economically disadvantaged businesses will be considered as the Department of Commerce reviews applications submitted for the CHIPS Act’s funding for manufacturing incentives.✓ The Department of Energy issued the first funding announcement under its \$750 million Advanced Energy Manufacturing and Recycling Grant program, which will support clean energy manufacturing projects from small- and medium-sized manufacturers located in coal communities.✓ The SBA finalized a rule in Spring 2023 lifting the cap for lenders for 7a programs and making the Community Advantage pilot a permanent program.✓ In July 2021, the President established a first-of-its-kind White House Competition Council to reverse the trend of increasing market concentration across the economy.
<p>Examine the ability of the U.S. Export–Import Bank (EXIM) to use existing authorities to further support both U.S. exports and domestic manufacturing.</p>	<ul style="list-style-type: none">✓ Approved by the EXIM Board in April 2022, the Make More in America Initiative allows companies to tap existing medium- and long-term loans, loan guarantees, and insurance authorities for export-oriented domestic manufacturing and infrastructure projects.



Recommendation II: Support Quality Markets that Invest in Workers and Value Sustainability

June 2021 Recommendation:	As of June 2023:
Create 21 st -century standards for the extraction and processing of critical minerals.	✓ The Department of the Interior has established an Interagency Working Group (IWG) to lead an Administration effort on legislative and regulatory reform of mine permitting and oversight, ensuring we secure the critical minerals we need in a timely, responsible, and sustainable manner. The IWG released a list of the Administration’s fundamental principles for mining reform to promote responsible mining under strong social, environmental, and labor standards that avoids the historic injustice that too many mining operations have left behind, while driving efficiency and transparency in the permitting process. The Department of the Interior will release the full report later this month.
Identify potential U.S. production and processing locations for critical minerals.	✓ Through appropriations from the Bipartisan Infrastructure Law, the U.S. Geological Survey Earth Mapping Resources Initiative (Earth MRI) will deploy \$320 million over five years to accelerate the identification of areas with potential critical mineral resources.
Improve transparency throughout the pharmaceuticals supply chain.	✓ The Food & Drug Administration (FDA) has issued guidance for industry regarding new FDA authorities in the CARES Act to require manufacturers of certain listed drugs and biological products (including active pharmaceutical ingredients) to report annual manufacturing volumes—data that will help enhance understanding of pharmaceutical supply chains and shortages.



Recommendation III: Leverage Government as a Purchaser of and Investor in Critical Goods

June 2021 Recommendation:	As of June 2023:
<p>Use federal procurement and Buy American to strengthen U.S. supply chains.</p>	<ul style="list-style-type: none"> ✓ The “Build America, Buy America Act,” which was enacted as a part of the Bipartisan Infrastructure Law, requires that all iron, steel, manufactured products, and construction materials in federally-funded infrastructure projects be produced domestically. ✓ In March 2022, the Administration announced strengthened Buy American rules, increasing domestic content thresholds from 55% to 60%, phasing up to 75% by 2029. This threshold will be used to determine which products will qualify as Made in America for federal purchases. ✓ President Biden signed E.O. 14057 in December 2021, directing the launch of a Buy Clean Task Force to promote the use of low-carbon, Made in America construction materials for federal procurement and funding of infrastructure projects. The Inflation Reduction Act provided the Buy Clean initiative with \$4.5 billion. ✓ The Inflation Reduction Act contains bonus tax credits for utilizing domestic content in certain clean energy projects. Treasury and the IRS released initial guidance for this bonus tax credit in May 2023. ✓ In November 2022, the Biden Administration proposed a <i>Federal Supplier Climate Risks and Resilience Proposed Rule</i>, which requires major Federal contractors to publicly disclose their greenhouse gas emissions and climate-related financial risks as well as set science-based emissions reduction targets.
<p>Strengthen domestic production requirements in federal grants for science and climate R&D.</p>	<ul style="list-style-type: none"> ✓ The Department of Energy has strengthened the manufacturing commitment in its R&D contracts over the Bayh-Dole Act baseline, encouraging the



	<p>domestic commercialization and manufacturing of technologies seeded with federal R&D funds.</p> <ul style="list-style-type: none">✓ The White House has led interagency coordination to strengthen domestic production commitments for federally-funded inventions and streamline the database for inventions made with federal R&D dollars (iEdison).
Reform and strengthen U.S. stockpiles.	<ul style="list-style-type: none">✓ In October 2021, President Biden streamlined the National Defense Stockpile by signing E.O. 14051 to delegate authority for the release of strategic and critical materials to the Under Secretary of Defense for Acquisition and Sustainment.✓ In February 2022, the Department of Energy, Department of Defense, and the Department of State signed a memorandum of agreement to better coordinate stockpiling activities to support the U.S. transition to clean energy and national security needs.✓ The Fiscal Year 2023 National Defense Authorization Act authorized \$1 billion for the National Defense Stockpile to acquire strategic and critical materials to meet the defense, industrial, and essential civilian needs of the United States, the largest authorization in more than 30 years.
Ensure that new automotive battery production in the United States adheres to high labor standards.	<ul style="list-style-type: none">✓ The Department of Energy developed guidance to integrate job quality and labor standards into its grants and loans, which was included in the Department's grants for battery manufacturing, recycling, and materials processing.✓ The Department of Energy launched the Battery Workforce Initiative, a partnership with labor, industry, and government to develop training programs and materials for key occupations in the battery manufacturing supply chain.



Recommendation IV: Strengthen International Trade Rules and Enforcement Mechanisms

June 2021 Recommendation:	As of June 2023:
<p>Establish a U.S. Trade Representative-led trade strike force to identify unfair foreign trade practices that have eroded U.S. critical supply chains and ways for existing and future U.S. trade agreements to help strengthen our collective supply chain resilience.</p>	<p>✓ The United States Trade Representative’s Supply Chain Trade Task Force has delivered results and continues to work with like-minded partners and stakeholders to strengthen critical supply chain resiliency in six key areas: (1) addressing food insecurity in the wake of Russia’s invasion of Ukraine, (2) tackling forced labor in global supply chains, (3) continuing collaboration with partners on supply chain issues, (4) facilitating trade in safe and effective medicines and minimizing drug shortages, (5) securing smoother movement of essential products, (6) protecting uninterrupted North American trade during emergencies.</p>
<p>Evaluate whether to initiate a Section 232 investigation on imports of neodymium magnets.</p>	<p>✓ On Feb 14, 2023, the Commerce Department released a report on the findings of the 232 investigation into the effect of neodymium-iron-boron (NdFeB) permanent magnets on national security and provided recommendations to facilitate the development of a domestic NdFeB magnet industry.</p>



Recommendation V: Work with Allies and Partners to Decrease Global Vulnerabilities

June 2021 Recommendation:	As of June 2023:
<p>Expand multilateral diplomatic engagement, including hosting a new global forum on supply chain resilience.</p>	<ul style="list-style-type: none"> ✓ In October 2021, the President hosted a Summit on Global Supply Chain Resilience with the European Union and 14 other countries. ✓ In July 2022, Secretaries Blinken and Raimondo hosted the Supply Chain Ministerial to further foster multilateral support for supply chain resilience. Twenty-eight countries have joined the Joint Statement of Cooperation on Global Supply Chains and pursue the principles of Transparency, Diversification, Security, and Sustainability. ✓ In May 2023, G7 leaders released a Statement on Economic Resilience and Economic Security and formally launched the G7 Coordination Platform on Economic Coercion to increase our collective assessment, preparedness, deterrence, and response to economic coercion. ✓ In May 2023, G7 Leaders also released the Clean Energy Economy Action Plan which aligned the G7 on a path towards building secure, resilient, affordable, and sustainable clean energy supply chains and strong industrial bases that reduce undue strategic dependencies and benefit local workers and communities around the world. ✓ During their annual meeting held in May 2023, the leaders of the Export Credit Agencies of the G7, including the U.S. Export-Import Bank (EXIM), shared their respective approaches to supply chain diversification efforts with regard to critical raw materials. ✓ In May 2023, the 14 partners of the Indo-Pacific Economic Framework for Prosperity (IPEF) announced the substantial conclusion of negotiations of a first-of-its-kind international IPEF Supply Chain Agreement, which will increase the resilience, efficiency, productivity, sustainability, transparency,



	<p>diversification, security, fairness, and inclusivity of our supply chains.</p> <ul style="list-style-type: none">✓ In May 2023, G7 leaders hosted a Partnership for Global Infrastructure and Investment (PGII) event where the G7 announced new investments and affirmed their shared commitment to collaborate with partners to develop transformative ecosystems of infrastructure investment that support inclusive growth, benefit partners' economic security, and diversify our global supply chains through PGII. President Biden announced that the U.S. Government had mobilized \$30 billion toward PGII to date.
<p>Leverage the U.S. International Development Finance Corporation (DFC) and other financing tools to support supply chain resilience with allies and partners.</p>	<ul style="list-style-type: none">✓ In Q4 2022, the DFC approved 62 transactions totaling more than \$2.3 billion of investment – the greatest number of transactions in a single quarter to date. Approved projects were diverse in geography and sector: agriculture exports in the Philippines, digital shipping and logistics in the Middle East, mariculture in Indonesia, communications infrastructure in Georgia, critical minerals production in Ireland and Brazil, and a major shipping port in Ecuador.✓ EXIM worked with allies and partners to support supply chain resilience across several industries, including by expressing intent to consider opportunities to provide financing support for U.S., Australian, and Korean export projects involving critical minerals; signing a Memorandum of Understanding with the Government of Tanzania to facilitate financing in infrastructure, transportation, digital technology, climate and energy security, and power generation and distribution projects; and approving a direct loan for more than \$900 million, together with their Korean and Swedish counterparts, to support solar energy in the Republic of Angola, the largest renewables project in EXIM history.



Recommendation VI: Monitor Near-Term Supply Chain Disruptions as the Economy Reopens

June 2021 Recommendation:	As of June 2023:
Establish a Supply Chain Disruptions Task Force to address near-term supply chain challenges to the economic recovery.	<ul style="list-style-type: none">✓ The Supply Chain Disruptions Task Force has been successfully established and executed. The Task Force addressed two major COVID-19 variants that exacerbated labor and supply chain challenges across the goods movement chain. The private-public coordination led by this taskforce improved the flow of goods into and within the United States – moving products critical to American families from ports to shelves.
Create a data hub to monitor near-term supply chain vulnerabilities.	<ul style="list-style-type: none">✓ The Department of Transportation launched the FLOW initiative in March 2022, which now has over 60 participants, to provide an information exchange platform on freight movement to help address supply chain challenges and increase the resilience of the transportation logistics network.✓ The Department of Commerce also developed an early alert system in October 2021 for emerging disruptions in semiconductor production overseas.