



Department of Energy

DOE Releases First-Ever Comprehensive Strategy to Secure America's Clean Energy Supply Chain

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DOE Report Includes Over 60 Actions to Enhance Supply Chain Resiliency, Spur Domestic Manufacturing Capacity, and Create Millions of Good Paying Jobs for American Workers

WASHINGTON, D.C. — The U.S. Department of Energy (DOE) today released America's first comprehensive plan to ensure security and increase our energy independence. The sweeping report, **"America's Strategy to Secure the Supply Chain for a Robust Clean Energy Transition,"** lays out dozens of critical strategies to build a secure, resilient, and diverse domestic energy sector industrial base that will establish America's role as a global leader in clean energy manufacturing and innovation. In addition to spurring job creation and economic growth, these strategies to invest in and strengthen America's supply chains will help combat inflation and reduce costs for American families and businesses by protecting against global supply chain disruptions and backlogs that drive up prices. The report was produced in response to President Biden's [Executive Order 14017, America's Supply Chains](#), and is supported by 13 deep-dive supply chain assessments across the energy sector—ranging from solar energy to semiconductors to cybersecurity. As the Federal government begins to implement the Bipartisan Infrastructure Law, which provides \$62 billion in energy sector funding, DOE's report summarizes how the U.S. can capture the economic opportunity inherent in the energy sector transition and build a world-class American energy manufacturing base and workforce.

"Taking bold action to invest in our supply chains means America will reap the tremendous opportunities that tackling climate change presents to kickstart domestic manufacturing and help secure our national, economic, and energy security," said **U.S. Secretary of Energy Jennifer M. Granholm**. "The strength of a nation relies on resilient and reliable critical supply chains across sectors, and DOE's report provides the key strategies and recommendations for Congress and the Federal government to act now to help deliver more jobs and a stronger, cleaner future."

[READ DOE's supply chain report and the supporting 13 deep-dive assessments](#)

Demand for clean energy technologies such as wind turbines and batteries for electric vehicles has increased significantly as technology costs have plummeted over the last decade. The global clean energy market is expected to grow exponentially — reaching \$23 trillion at a minimum by 2030.

Without new domestic raw materials production and manufacturing capacity, the U.S. will continue to rely on clean energy imports, exposing the nation to supply chain vulnerabilities while simultaneously losing out on the enormous job opportunities associated with the energy transition. Yet, in many cases, the United States has untapped potential to support greater domestic production.

Recent shortages of foreign-manufactured automotive semiconductor chips due to the COVID-19 pandemic have forced slowdowns at U.S. car manufacturing plants, highlighting how shortages can hurt American workers. The strategies and actions included in this report will ensure the United States has the capacity to respond quickly in the face of challenges such as global production shortages, trade disruptions, and natural disasters — and to bolster a domestic clean energy supply chain that leads the global economy.

“America’s Strategy to Secure the Supply Chain for a Robust Clean Energy Transition” provides seven key areas for boosting supply chain resiliency and rebuilding American manufacturing:

- **Increase availability of critical materials** – Critical minerals, such as cobalt for batteries and rare earth elements like neodymium for offshore wind, are key components to the clean energy technology we need to achieve our national climate and economic goals.
- **Expand domestic manufacturing capabilities** – There is opportunity to boost America’s manufacturing capabilities Through efforts such as increased funding for workforce development, investments in manufacturing programs to support the clean energy transition, and coordinating with manufacturers and state, local, and tribal governments to support the establishment of regional clean energy industrial clusters.
- **Invest and support the formation of diverse, reliable, and socially responsible foreign supply chains** – This will complement domestic opportunities to diversify clean energy supply chains, such as promoting the adoption and implementation of traceability standards to improve global supply chain mapping capabilities. These actions will instill integrity of product custody, and support carbon footprinting of energy supply chains, as well as build on current efforts to support investments in America’s supply chain security—such as investing in a graphite mine in Mozambique—a mineral key to lithium-ion battery manufacturing.
- **Increase the adoption and deployment of clean energy** – By leveraging federal purchasing power, we can provide a sustained demand signal for both domestic clean energy products and the capability to manufacture them in the United States, advancing activities to grow and sustain the demand signal for sustainable transportation fuels and associated supply chain industries.
- **Improve end of life energy-related waste management** – This includes advancing technologies to recycle and recover valuable materials like batteries, aluminum, and steel that can continue to feed domestic clean energy supply chains safely and effectively.
- **Attract and support a skilled workforce for the clean energy transition** – By working across government to embed strong labor standards and support for organized labor in federal funding for the energy sector industrial base, and engaging key stakeholders, we can set strategic nationwide plans to encourage the creation of good, family-sustaining, union jobs with competitive wages and benefits.
- **Enhance supply chain knowledge and decision making** – Developing supporting studies that assess and quantify the economic, environmental, social, and human rights impacts of different aspects of the energy supply chain for all clean technologies, and the creation and maintenance of a manufacturing and energy supply chain office as well as database and analytical modeling capabilities, will help ensure supply chain policy and investment decisions are grounded in an understanding of critical factors such as risks, dependencies, material availability, and supply chain and market dynamics.

DOE has already made great progress addressing supply chain vulnerabilities and is taking significant steps to further secure our energy supply chains. Ongoing efforts include:

- **Mining Innovations for Negative Emissions Resources (MINER) Program:** Today, DOE released a \$44 million funding opportunity for the MINER program which will provide commercial-ready technologies that give the United States a net-zero or net negative emissions pathway toward increased domestic supplies of copper, nickel, lithium, cobalt, rare earth elements, and other critical elements required for a clean energy transition.
- **New Manufacturing and Energy Supply Chains Office:** DOE is creating a new Manufacturing and Energy Supply Chains Office that will focus on strengthening and securing energy supply chains needed to modernize the nation’s energy infrastructure and support the clean energy transition. This office will engage with private-sector companies, other Federal agencies, and key stakeholders to collect, analyze, respond to, and share data about energy supply chains to inform future decision making and investment.
- **Rare Earth Element Facility:** DOE has released a Request for Information for the \$140 million allocated from the Bipartisan Infrastructure Law for the design, construction, and build-out of a facility to demonstrate the commercial feasibility of a full-scale integrated rare earth element facility for extraction, separation, and refining. This first-of-a-kind of facility will accelerate U.S.-made rare earth elements processing technologies that will boost domestic manufacturing of rare earth metals crucial for clean energy and national defense industries.
- **Clean Hydrogen Hubs:** DOE has released a Request for Information for the \$8 billion allocated from the Bipartisan Infrastructure Law to establish at least four Regional Clean Hydrogen Hubs to serve as a network of clean hydrogen producers, potential clean hydrogen consumers, and connective infrastructure.
- **High-Capacity Batteries:** Building on the 100-day supply chain report on high-capacity batteries issued by DOE last spring, Congress included in the Bipartisan Infrastructure Law

more than \$6 billion to fund domestic battery materials processing, manufacturing, and recycling that will help improve grid resilience and scale up the electrification of cars, trucks, and buses. These grants, starting with two Notices of Intent just released for funding worth nearly \$3 billion, will allow companies to expand and build new American factories with quality job opportunities in regions throughout the country.

Critical Minerals and the National Defense Stockpile: The Departments of Energy, Defense, and State executed a memorandum of agreement (MOA) that sets the foundation for a critical minerals stockpile to support the U.S. transition to clean energy and national security needs. The MOA formalizes an interagency partnership to acquire and recycle selected materials for technologies that range from grid-scale batteries to wind turbines.

“America’s Strategy to Secure the Supply Chain for a Robust Clean Energy Transition”

represents not only dozens of specific actions that DOE is taking or commits to taking, but it details a whole-of-government approach to the nation’s energy supply chain challenges and opportunities. The strategies described in the report lay out inter-agency collaboration on efforts such as small business loans, foreign investment in U.S. manufacturing, community engagement on mining for critical minerals, and port infrastructure to handle energy product shipping.

The report also includes more than 20 recommendations for congressional action related to the energy supply chain, such as:

- Enact legislation to provide tax incentives to support domestic clean energy manufacturing and deployment, including incentives for building new facilities and for the ongoing operation of those facilities.
- Appropriate funding to DOE to utilize Title III of the Defense Production Act in partnership with the President.
- Appropriate funds to establish regional and state-level sector partnerships and Registered Apprenticeships to recruit, train, and place workers into careers needed for domestic supply chains.

To learn more about “America’s Strategy to Secure the Supply Chain for a Robust Clean Energy Transition,” view the [Fact Sheet](#) or visit www.energy.gov/policy/supplychains to download the entire report or read the 13 other deep dive assessments that are part of the DOE response to the supply chain executive order.



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