

The America COMPETES Act Would Invest in Cutting-Edge Science and Technology to Protect Critical Supply Chains, Support Manufacturing Jobs, and Maintain America’s Competitive Edge

The recently introduced [America COMPETES Act](#) is the House version of the United States Innovation and Competition Act (USICA), which passed the U.S. Senate with overwhelming bipartisan support in June 2021. The COMPETES Act addresses problems that have long hindered American innovation, research and manufacturing. The Act invests in supply chains for critical technologies such as semi-conductors and supports production in the U.S. from start to finish, beginning with cutting-edge research through to domestic manufacturing. By increasing investment, creating jobs and spurring innovation, the COMPETES Act would improve America’s competitive edge internationally.

Research and innovation are key to economic growth and maintaining America’s competitive edge

Research and technological innovation are the foundations of future economic growth. Scientific research is foundational to American innovation and long-term economic growth. New products, processes and approaches can support new businesses or entire industries, leading to improved living standards and economic development both in the U.S. and worldwide. Economic growth relies on innovation, which ranges from basic research to technological development to entrepreneurship, to power the economy.

The America COMPETES Act would help keep the U.S. on the cutting edge of technological development, including artificial intelligence, quantum computing, biotechnology and advanced energy. The bill supports new efforts focused on advanced technologies by investing the Department of Energy’s Office of Science, the National Science Foundation’s new Directorate for Science and Engineering Solutions and the National Institute of Standards and Technology. Together, these programs can expand the innovation pipeline for the new technologies that will be vital in the 21st century economy.

To make sure that the high-paying jobs in research and innovation benefit communities across the country, the America COMPETES Act would invest in regional technology hubs. These regional hubs would provide grants and strategic assistance to help ensure that the local benefits of new research and innovation reach local communities.

Investment in manufacturing will power long-term economic growth and support high-quality jobs at home

Decades of outsourcing have eroded [domestic manufacturing](#) jobs and made the U.S. reliant on imports for many manufactured goods. Manufacturing has long been a core strength of the American economy but increasing global competition has threatened many of these high-quality jobs. Since January 2000, the United States has lost over a quarter of all domestic manufacturing jobs, a decline of over 4.7 million. Increased [competition from China](#) cost the U.S. approximately 985,000 manufacturing jobs between 1991 and 2011.

By investing in workers and small and mid-size manufacturers, the America COMPETES Act would strengthen domestic innovation and advanced manufacturing via the

Hollings Manufacturing Extension Partnership (MEP) and the Manufacturing USA program. These investments would help domestic manufacturers remain competitive by directly working with companies across the country. The [MEP](#) provide manufacturing, business, and process technical assistance to local small- and medium-sized manufacturers in order to help them grow and thrive. [Manufacturing USA](#) establishes private-public partnerships to solve industry-relevant advanced manufacturing challenges and increase American competitiveness. The America COMPETES Act would also strengthen the [Registered Apprenticeship Program](#), which provides paid on-the-job training, and other educational programs to fill the training gap created by increasing automation and corporate disinvestment. Together, these programs support high-quality manufacturing jobs across the country.

The America COMPETES Act would help create a pipeline from advanced research to domestic manufacturing in the U.S, ensuring that the U.S. reaps more of the economic gains from innovation.

The U.S. is a leader in advanced research, but manufacturing and production often wind up overseas. The United States has a strong [innovation ecosystem](#), ranging from cutting-edge university research to federal technology development agencies to vibrant entrepreneurship and commercialization of new technologies. However, competition from China and other countries has threatened American growth in this space. This is especially visible in advanced manufacturing, where other countries have built new manufacturing sectors based on American research discoveries. For example, though U.S. scientists [initially developed](#) photovoltaic technology for solar panels, subsidies from the Chinese government later enabled [Chinese manufacturers](#) to dominate solar panel production.

The America COMPETES Act bolsters a research pipeline that begins with innovation and leads to manufacturing jobs here in the U.S. By investing in research, supply chain stability and manufacturing partnerships, the America COMPETES Act encourages advanced technology and manufacturing from start to finish. Together, this suite of policies represents a vital down-payment on the future of the U.S. economy.

The America COMPETES Act would address vulnerabilities in the U.S. supply chain that were highlighted by the coronavirus pandemic

The coronavirus pandemic has shown the perils of relying on global supply chains for critical components after shutdowns abroad caused shortages that pushed up prices for American consumers. For example, pandemic-induced factory shutdowns abroad led to a global shortage on semiconductors, which are [necessary](#) to produce electronics and automobiles. Price increases in the automobile sector played an [outsized role](#) in driving up 2021 headline inflation. While the pandemic was a particularly extreme disruption, supply chain shocks are [common](#), making long-term solutions essential.

The America COMPETES Act invests \$45 billion to strengthen supply chains. These funds can support direct manufacturing or acquisition of vital goods, strengthen domestic manufacturing, spur logistical and technological innovations in supply chains, and stockpile critical goods to build economic resilience. The bill would establish an office in the Department of Commerce to take the lead on monitoring and supporting supply chains, especially for critical goods.

To encourage domestic production of semi-conductors, the America COMPETES Act invests \$52 billion in domestic chip manufacturing. This investment would bolster advanced research, design, and manufacturing of semi-conductors, keeping the U.S. on the cutting edge of semi-conductor production and creating high-quality manufacturing jobs. Increasing the domestic production of semi-conductors will also reduce American dependence on fragile global supply chains. These investments seek to even the playing field for American companies, as [many other countries](#) have provided similar support for advanced semi-conductor manufacturing.