

Policy Checklist To Accelerate American Tech Innovation & Win The Tech Race With China

The Urgent Need for Accelerating American Innovation Across Multiple Technologies

American innovation, entrepreneurship and exceptionalism have long propelled the United States to global leadership. Technology has strengthened our economy, enhanced national security and promoted freedom and democracy worldwide. With a direct economic impact exceeding \$2 trillion, the U.S. tech sector is a cornerstone of American strength, enabling entrepreneurs to compete, empowering small businesses, and ensuring our military and intelligence agencies remain the most advanced in the world.

But America's leadership is no longer guaranteed. Two decades ago, the United States led in **60 of 64** critical technologies, but today, that number has dwindled to just **seven**. Meanwhile, China has surged from leading in only **three** of these fields to dominating **57** — a stunning reversal of global research leadership. **This shift, shown in the chart below, is not accidental:** it is the result of decades of strategic planning by China, sustained investment and a clear national mission to lead in critical technologies.

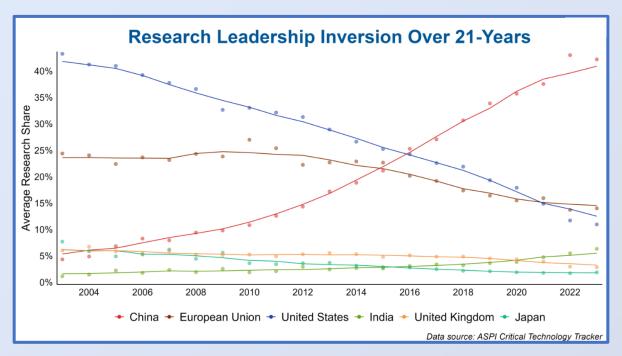


Figure One: Australian Strategic Policy Institute <u>Critical Technology Tracker</u>. This chart tracks the global shift in **high-impact research**, measuring the output of a country's top corporations, academic institutions, government agencies, and national labs. It highlights the top 10 percent of the most cited papers—the research that drives technological breakthroughs, fuels patents, and shapes the future of innovation. To be clear, research leadership tracked in the chart is different than commercialization leadership, but it is a crucial precursor to technological dominance. The country that leads in high-impact research builds the foundation for future innovation breakthroughs, commercial expansion, and global standard-setting.

That's why our race against China is about more than just technology. It is a battle of values, security and economic power. If the Chinese Communist Party (CCP) succeeds, China will dictate the global rules for AI, quantum computing, semiconductors and more, embedding its model of digital authoritarianism into the world's technological infrastructure. *The choices made by the 119th Congress and the new administration will shape America's standing for decades to come.*

The United States must respond with urgency and ambition. Just as the Space Race galvanized a generation of innovators and secured American dominance in aerospace, we must embrace leadership in AI, semiconductors, and quantum computing as our modern-day moonshot effort. This requires a whole-of-nation commitment that includes long-term research investment, strategic partnerships with allies, and policies that empower American entrepreneurs and companies to lead.

The following checklist outlines the key policy actions needed to accelerate innovation, counter China's ambitions, prevent self-inflicted setbacks and ensure that the digital economy benefits all Americans.







ACCELERATE AMERICAN INNOVATION

STRATEGIC INVESTMENTS AND PARTNERSHIPS

- → Seize the Historic Opportunity to Secure Lasting American AI Leadership: The incoming administration and the new Congress have the chance to make AI America's modern-day moonshot, garnering the United States a multi-decade advantage in national security and economic prosperity. Achieving this requires bold investments in energy generation and transmission, Science, Technology, Engineering and Mathematics (STEM) education, advanced semiconductor production, cybersecurity, quantum and a skilled workforce to support the U.S. AI ecosystem. This shared national mission must prioritize the infrastructure, research, and talent pipelines necessary to power America's leadership in AI and other transformative technologies. By uniting public and private sectors around this vision, including federal and state policymakers, the United States can outpace global competitors and set the standard for innovation. ¹
- → Be the World's Open-Source and Closed-Source AI Leaders: China is expanding open-source AI to dominate global markets, and if the United States fails to compete, Beijing will set the rules for AI worldwide. Experts, including Eric Schmidt, <u>recognize open-source AI</u> as critical to U.S. security, warning that if America does not lead, China will become the global open-source AI leader, forcing much of the world to rely on CCP-controlled technology. At the same time, closed-source AI is essential for defense and economic security. To secure its future, America cannot unilaterally cede either open- and closed-source AI, and in fact must lead in both to ensure allies use trusted U.S. models – not China's.²
- → Leverage Strategic Partnerships and Investments: Policymakers should view American private sector tech companies as critical allies in maintaining the United States' technological and military edge. Government should establish frameworks that provide financial incentives for technology companies to invest in research and development (R&D) in critical areas and ensure that global technology companies view the United States as their preferred investment location. This includes greater tax policy incentives, reducing regulatory barriers and creating publicprivate partnerships in emerging technologies.³
- → Strengthen Cybersecurity Protections: Governments should partner with the private sector to strengthen U.S. cybersecurity capabilities to help protect against cyberattacks on critical infrastructure, technology and trade secret theft, deter foreign election interference and protect

¹ American Edge Project, "<u>American Vs. Authoritarian AI Models</u>," 2024; American Edge Project, "<u>Unleashing American Innovation: A Policy Roadmap To Win The Global Tech</u> <u>Race</u>," 2024; Atlantic Council, "<u>Standardizing the Future</u>," 2021; American Edge Project, "<u>American Innovation Under Siege: Venture Capital Data Reveal Risks From Rising</u> <u>Global Regulatory Overreach</u>," 2024¹

² American Edge Project, "American Vs. Authoritarian AI Models," 2024

³ American Edge Project, "The Decisive Decade: A National Security Policy Designed To Help America Win The Tech Race Against China," 2023; Lexington Institute, "The New Arsenal of Democracy." 2022

national security. This includes designating cloud computing as critical infrastructure and increasing cybersecurity standards, given its importance to both national security and innovation.⁴

- → Strengthen U.S. Energy Infrastructure to Power AI Growth and Security: America must secure and modernize its energy infrastructure to meet the rising demands of AI development and defend against cyber threats from adversaries, such as China, Russia and Iran. While China has built 30,000 miles of ultra-high voltage (UHV) transmission lines and invested \$442 billion in grid modernization to power its AI expansion, the United States has zero UHV lines and an overloaded, outdated grid that is stalling 12,000 domestic energy projects. Without urgent investment in transmission and energy security, the United States risks falling behind in AI and leaving critical infrastructure vulnerable to foreign threats.⁵
- → Improve Supply Chain Resilience Through Nearshoring and Friendshoring: Incentivize industry to produce key dual-use technologies and products closer to home or in allied countries, thereby reducing U.S. and Western dependency on Chinese manufacturing, products and technological innovations while also minimizing future supply chain disruptions. ⁶

STRENGTHEN INNOVATION ECOSYSTEMS AND THEIR GROWTH

- → Remove Digital Trade Barriers: The United States should reaffirm its commitment to digital trade principles that support the free flow of data across borders, prohibit data localization mandates and protect proprietary software source code from forced disclosures. This approach will counter authoritarian regimes, namely China, maintain U.S. technological leadership, expand opportunities for small businesses and promote global economic security. ⁷
- → Strengthen and Improve Funding for Startup Ecosystems: Support the growth of startups by enhancing access to capital through government-backed loan programs, incentivizing private investment in early-stage companies and promoting merger and acquisition (M&A) activity to help startup develop and scale emerging technologies. Additionally, harmonize regulations to reduce growth bottlenecks and expand innovation ecosystems across the United States, ensuring a vibrant environment for launching new technologies.⁸
- → Promote Local Innovation Initiatives: Encourage individual states to develop unique innovation priorities that align with national strategies. This could include regional AI and quantum centers, backed by incentives for tax credits, venture capital and education and training initiatives.⁹

⁵ American Edge Project, "The American Playbook to Win the Al Race Against China," 2025

⁷ The Hill, "The Digital Crossroads: U.S. Leadership At Stake In The Global Trade Arena," 2024

⁴ American Edge Project, "<u>The Decisive Decade: A National Security Policy Designed To Help America Win The Tech Race Against China</u>," 2023; American Edge Project, "<u>How</u> <u>American Values Can Keep The Global Internet Free, Open And Accessible</u>," 2023

⁶ American Edge Project, "The Decisive Decade: A National Security Policy Designed To Help America Win The Tech Race Against China," 2023

⁸ American Edge Project, "<u>Unleashing American Innovation: A Policy Roadmap To Win The Global Tech Race</u>," 2024; American Edge Project, "<u>American Innovation Under Siege:</u> <u>Venture Capital Data Reveal Risks From Rising Global Regulatory Overreach</u>," 2024

⁹ American Edge Project, "<u>Unleashing American Innovation: A Policy Roadmap To Win The Global Tech Race</u>," 2024

→ Maximize State-Driven Innovation: Encourage states to implement pro-innovation public policy, such as regulatory sandboxes, to foster national innovation. These approaches allow companies to experiment with new products without fear of punitive actions, which enhances innovation ecosystems, propels local economies and creates new tech jobs.¹⁰

CHECK CHINA'S GLOBAL AMBITION

HARNESS THE POWER OF ALLIANCES AND STRATEGIC TECHNOLOGIES

- → Strengthen Alliances to Counter China's Efforts to Influence International Technology Standard Setting: Collaborate with global allies to establish international technology standards and policies that advance democratic and Western values. Focus on leading with high-quality, innovative technologies in standards development organizations (SDOs) to counter efforts by techno-autocracies to steer international technology standard setting bodies.¹¹
- → Promote U.S.-Led Standards in Global AI Governance Through Partner Collaboration: The United States must lead in establishing international AI standards that reflect democratic values through multiple forums, including the United Nations (UN), Organisation for Economic Cooperation and Development (OECD), the International Telecommunications Union (ITU), the Convening of International Network of AI Safety Institutes and regional platforms, such as the Association of Southeast Asian Nations (ASEAN) and the African Union. Collaborating with allies and developing nations on AI education, infrastructure, and tools provides a democratic alternative to China's Belt and Road Initiative (BRI) and Digital Silk Road (DSR) programs. These combined efforts are essential to countering authoritarian AI systems, ensuring they do not become the global default and strengthening U.S. influence in shaping a values-driven global AI governance framework.¹²

→ Leverage Public-Private Partnerships and U.S. Technology to Counter Digital

Authoritarianism: The United States must forge strong <u>public-private partnerships</u> to deploy American AI solutions that address global challenges, such as energy, food security and healthcare, while also expanding U.S. influence abroad. By working closely with U.S. tech firms, the federal government can amplify the global reach of American AI, counter China's push for digital authoritarianism, and establish deep, lasting technological partnerships in Latin America, Africa and Asia – ensuring these regions are not forced into tech dependence on Beijing.¹³

- ¹¹ American Edge Project, "Unleashing American Innovation: A Policy Roadmap To Win The Global Tech Race," 2024] [Atlantic Council, "Standardizing the Future," 2021
- ¹² American Edge Project, "American Vs. Authoritarian Al Models," 2024
- ¹³ American Edge Project, "American Vs. Authoritarian Al Models," 2024

¹⁰ American Edge Project, "American Innovation Under Siege: Venture Capital Data Reveal Risks From Rising Global Regulatory Overreach," 2024

COUNTER CHINA'S TECHNOLOGICAL ADVANCEMENTS

- → **Counter and Disrupt Chinese Technology Threats:** Accelerate technological decoupling from China on critical and sensitive technologies, heighten scrutiny of Chinese companies operating in the United States and take steps to disrupt the deployment of Chinese technologies to allies, reducing global dependency on China-made technology, while preventing data theft, surveillance and malign influence operations.¹⁴
- → Avoid Unilateral Restrictions on Exporting and Access to U.S. AI Systems: As China aggressively hardwires its censoring AI systems into the global digital infrastructure, the United States must ensure its AI solutions remain competitive and widely adopted. Unduly restricting the export of/access to U.S. AI models, especially open-source ones, would undermine the broader American innovation ecosystem (particularly public section innovation at U.S. universities), while handing Beijing an unchallenged advantage in shaping global norms. Numerous reports show that China already has accessed, and has possibly stolen, our country's most sophisticated AI models of all types, and are exceeding U.S. models with domestically-developed ones. Instead, policymakers must focus on making American AI systems, grounded in democratic values, become the preferred choice for allies and partners to prevent the spread of authoritarian technologies and secure U.S. leadership in the global AI race. This is the only way America can compete against China in the Global South and other critical markets.¹⁵
- → Address the Impact of Antitrust on Global Competition: Reconsider current antitrust policies that may slow down technological innovation in key areas, such as AI, which are crucial for maintaining U.S. competitiveness against China. Overly stringent antitrust enforcement, particularly by the U.S. Federal Trade Commission (FTC), can harm U.S. innovation and hand China a strategic advantage in the global tech race.¹⁶

PROTECT DEMOCRATIC VALUES

- → Promote U.S. Tech Values Abroad: Empower the private sector to serve as "ambassadors" of U.S. values abroad by promoting technologies that reflect democratic principles. ¹⁷
- → Advocate for Internet Freedom: The U.S. government and our allies must actively promote a vision of an open and accessible internet that supports the free flow of information and ideas, reinforcing American values of freedom and democracy on the global stage.¹⁸
- → Increase U.S. Leadership in Standards-Setting Bodies: The United States needs to regain leadership in international standards-setting bodies, such as those governing 5G and AI, to

¹⁴ American Edge Project, "<u>The Decisive Decade: A National Security Policy Designed To Help America Win The Tech Race Against China</u>," 2023; American Edge Project, "<u>How American Values Can Keep The Global Internet Free, Open And Accessible</u>," 2023

¹⁵ American Edge Project, "American Vs. Authoritarian Al Models," 2024

¹⁶ Competitive Enterprise Institute, "<u>A Global Antitrust Paradox</u>," 2023

¹⁷ American Edge Project, "How American Values Can Keep The Global Internet Free, Open And Accessible," 2023

¹⁸ American Edge Project, "How American Values Can Keep The Global Internet Free, Open And Accessible," 2023

counteract China's growing influence. Additionally, the United States should enhance funding to organizations, such as the American National Standards Institute (ANSI) to ensure they can operate effectively and meet more frequently, thereby maintaining and growing U.S. leadership in global standards-setting.¹⁹

AVOID SELF-INFLICTED POLICY WOUNDS

EMBRACE LONG-TERM PLANNING AND REGULATORY RESTRAINT

→ Adopt a Long-Term Strategic Policy Lens: Policymakers must evaluate all tech regulations through the lens of long-term U.S. competitiveness and security, ensuring legislative actions undergo national security reviews to prevent unintended consequences that could undermine U.S. leadership. Misguided policies that may result in short-term political gains risk undermining U.S. leadership and granting unearned advantages to America's adversaries, namely China.²⁰

→ Champion Innovation Through Light-Touch Regulation: America must stop handcuffing its own innovation with misguided federal and state-level policies that restrict U.S. innovation without evidence of competitive harm. Overregulation, antitrust actions, excessive restrictions on AI exports, FTC merger challenges and bureaucratic roadblocks will only slow U.S. progress while giving China a free pass to dominate. European regulators must also stop burdening American tech companies with billions in fines and regulations, while leaving Chinese AI giants untouched. Instead of heavy-handed restrictions, the United States must champion innovation through light-touch regulation, ensuring AI development remains competitive, creative and globally dominant.²¹

→ Collaborate with Allies for Evenhanded Enforcement: The United States should continue working closely with its allies, particularly in Europe, to ensure that laws are enforced in a neutral and fair manner. Regulatory frameworks in Europe should avoid protectionist impulses that excessively target American firms, which creates imbalances and hinders global innovation. Ensuring evenhanded enforcement will allow U.S. Al firms to thrive internationally without being unfairly targeted.²²

¹⁹ American Edge Project, "National Security Policy," 2021; Atlantic Council, "Standardizing the Future," 2021

²⁰ American Edge Project, "The Decisive Decade: A National Security Policy Designed To Help America Win The Tech Race Against China," 2023

²¹ American Edge Project, "<u>The American Playbook to Win the Al Race Against China</u>, 2025; American Edge Project, "<u>Reform or Regress? An Assessment Of Proposed</u> <u>Antitrust Legislation</u>," 2022

²² American Edge Project, "The Fierce Competition Drive America's AI Leadership," 2024

SUPPORT THE FREE FLOW OF INFORMATION

- → Maintain Free Flow of Information and Encourage Robust Data Practices: The United States should maintain the free flow of information across borders and avoid policies that might lead to a fragmented "splinternet." Leverage our alliances to encourage strong cybersecurity and data protection practices among partners, countering China's influence over data-sharing infrastructure. This includes striking digital trade deals and incentivizing the adoption of strong data privacy protections globally.²³
- → Reject Data Localization: Oppose data localization efforts that threaten to stifle innovation and undermine the security of data. Companies should be able to determine data storage locations based on performance and security, not politics.²⁴

EXTENDED THE DIGITAL ECONOMY'S BENEFITS TO ALL

USE TECHNOLOGY TO BENEFIT EVERYONE AND PROMOTE EMERGING INDUSTRIES

- → Close the Digital Divide: Promote broadband access and affordability across America, particularly in rural and urban communities, to ensure all citizens benefit from technological advancements.²⁵
- → Strengthen the U.S. Technology Workforce and Talent Pipelines: Focus on growing America's technological workforce by investing in STEM education, creating more programs for university students to work in roles impacting national security, reskilling/upskilling our current workforce, and reducing hurdles for high-skilled foreign workers.²⁶
- → Support Traditional Industries and New Business Models: Use technology to bolster efficiencies and competitiveness in traditional industries, such agriculture, manufacturing and healthcare, with initiatives such as electronic patient records and AI-driven agricultural practices. Government policy should focus on empowering entrepreneurs to start new businesses and develop new technologies, while avoiding protectionist measures that favor legacy industries at the expense of innovation.²⁷

²³ American Edge Project, "<u>Economic Policy Agenda To Accelerate American Innovation</u>," 2022; American Edge Project, "<u>The Decisive Decade: A National Security Policy</u> <u>Designated To Help America Win The Tech Race Against China</u>," 2023

²⁴ American Edge Project, "How American Values Can Keep The Global Internet Free, Open And Accessible," 2023

²⁵ American Edge Project, "Unleashing American Innovation: A Policy Roadmap To Win The Global Tech Race," 2024

²⁶ American Edge Project, "<u>Unleashing American Innovation: A Policy Roadmap To Win The Global Tech Race</u>," 2024; American Edge Project, "<u>The Decisive Decade: A</u> <u>National Security Policy Designated To Help America Win The Tech Race Against China</u>," 2023

²⁷ American Edge Project, "<u>Unleashing American Innovation: A Policy Roadmap To Win The Global Tech Race</u>," 2024; American Edge Project, "<u>Economic Policy Agenda To</u> <u>Accelerate American Innovation</u>," 2022