

Responses to Questions for the Record for Dr. Eric Schmidt for the hearing before the U.S. House Committee on Energy & Commerce "Converting Energy into Intelligence: The Future of AI Technology, Human Discovery, and American Global Competitiveness" Wednesday, April 9, 2025 | 10:00 AM EST

The Honorable Mariannette Miller-Meeks, M.D.

1. In your written testimony, you stated that 'our goal should be to make energy so abundant that it is nearly free for our people and exportable to the world' and that Al development could require facilities demanding up to 10 gigawatts of power. You specifically mentioned fusion as a potential game-changing technology that should be declared a national priority. Could you elaborate on how fusion and other next-generation energy technologies could create the competitive advantage America needs in the Al race, and what specific federal investments would be required to accelerate these technologies to commercial scale before China achieves similar breakthroughs?

Response:

Fusion energy has the potential to be a transformative asset for America in maintaining AI leadership. As AI models become increasingly complex and are used throughout the economy, their energy demands will continue to grow, requiring the addition of many power plants' worth of electricity. Fusion offers a unique advantage: an abundant, safe, and near-limitless energy source that can deliver the firm power required to operate hyperscale AI data centers, factories, homes, businesses, and other critical infrastructure. Moving fusion from the lab to our grid would help offset higher domestic production costs and reinforce the United States as the global hub for AI innovation. For example, an estimated 10 gigawatts of power is needed for AI power growth in America. To reach that number of 10 GW, we would only need about 25 fusion power plants.

The federal government should take bold, coordinated action to secure this advantage ahead of strategic competitors like China. This includes declaring fusion energy a national security priority, appointing senior leadership at the Department of Energy to oversee commercialization efforts, and supporting a one-time \$10 billion investment in R&D facilities, pilot plant construction, and supply chain development. These investments would not only strengthen national security and energy resilience, but also catalyze public-private partnerships and ensure that the U.S. leads in both AI and the next-generation energy technologies that will power it.



The Honorable Doris Matsui

1. All is redefining our society, much as the internet did for the information age. And, while we should recognize the benefits of Al, we also need commonsense guardrails to protect against harms.

Al-driven content may not be accurate, as models can hallucinate, presenting false and misleading information as fact. Biased algorithms can also deepen inequalities and hurt consumers.

That's why I've championed legislation like the Algorithmic Justice and Online Platform Transparency Act to ban discriminatory algorithms and establish a safety and effectiveness standard.

Dr. Schmidt, how can we reduce bias and guarantee the reliability of AI outputs?

Response:

Al systems are getting more accurate over time. Improving the reliability of Al systems requires a combination of technical rigor, transparent standards, targeted regulation, and self-governance. Developers must prioritize data governance, as well as robust testing and evaluation across contexts, to find and address potential problems before deployment. Continued investment in explainable Al, benchmarking, and independent red-teaming will also enhance model trustworthiness.

Public-private efforts that bring government and industry together, including those led by the National Institute of Standards and Technology, can help establish clear standards for security, reliability, and transparency. Collaboration outside of government, such as through the private sector and nonprofit collaboration (e.g., ROOST), can help pool resources and ideas to find ways to mitigate critical harms. Lastly, focusing oversight on high-impact use cases, rather than regulating all AI equally, ensures that innovation and the security of AI consumers advance together.

2. Dr. Schmidt, in light of the increasing use of AI across various industries, how should government address concerns related to data privacy and security to protect consumers and businesses alike?

Response:



The government should provide baseline data privacy safeguards and work with companies to develop clear standards for data governance. We especially need to protect children online. Policy changes like those in the Take It Down Act are a good start.

This includes supporting the National Institute of Standards and Technology efforts to develop frameworks for secure data handling and advance privacy-enhancing technologies. At the same time, agencies should work with industry and nonprofits to promote responsible data stewardship, especially for sensitive sectors like healthcare and finance.

Focusing regulatory efforts on high-impact applications, especially those most likely to affect individuals' rights or safety, will help target protections where they are needed most without stifling innovation across the board.

3. Al and semiconductors, from memory and storage to photonic integrated circuits, play crucial roles in modern communication, including wireless networks, Wi-Fi technology, and advanced satellite systems.

Dr. Schmidt, how would delaying CHIPS funding impact the ability to produce semiconductors used in communications and AI infrastructure in the United States?

Response:

From a national security perspective, the National Security Commission on Al recommended that America on-shore high-end chips manufacturing in order to compete with China. Strengthening domestic capacity for producing the advanced semiconductors that power Al and communications technologies, including wireless networks, Wi-Fi, satellite systems, and others, is essential to our global technological competitiveness.

Delays in funding could slow the momentum needed to grow domestic manufacturing, which is a national security issue. Chips innovation in critical areas like memory, storage, photonics, and building the workforce to support it are necessary investments to achieve this strategy. Continued investment will help ensure that the United States remains a competitive and reliable leader in the semiconductor supply chain, supporting both national security and economic resilience.



4. Dr. Schmidt, what strategies are being implemented to prepare the American workforce for the shifts brought about by AI, ensuring that workers are equipped with the necessary skills for emerging job roles?

Response:

Preparing the American workforce for shifts expected by AI starts with building a strong pipeline of talent from within the United States and by attracting the best minds globally.

We need to invest in AI education and training across all levels, from expanding STEM opportunities to supporting hands-on experience through apprenticeships and partnerships with industry. This also includes training federal workers, especially those in national security. They should have access to free AI training, such as the SCSP-Coursera course designed to equip public servants with relevant, flexible skills.

At the same time, the United States must remain the top destination for global talent. Too often, we train exceptional individuals at our universities only to send them home to become competitors. Retaining this talent is critical to our long-term competitiveness.

5. Dr. Schmidt, given the challenges SMEs face in adopting AI—such as high implementation costs and the need for specialized talent—what initiatives are planned to support these businesses in remaining competitive in an AI-driven market? How can we enable affordable access and level the playing field for SMEs?

Response:

To help level the playing field, more public-private partnerships driven by real programs, like Apollo, are needed to share AI tools, cloud platforms, and technical assistance. One additional opportunity is the National Science Foundation's National AI Research Resource, recommended by the National Security Commission on AI. These types of efforts can reduce barriers and give smaller companies the resources they need to compete and innovate in an AI-driven market. Inclusion of SMEs in the innovation ecosystem is good for all players.

6. Dr. Schmidt, how can collaborations between the government and private sector be structured to accelerate the development and deployment of AI innovations while maintaining fair competition and safeguarding public interests?

Response:



Public-private partnerships are essential to accelerating AI innovation. The government can provide strategic direction and early-stage investment for AI applications while the private sector brings speed and technical expertise.

Structured around clear goals, these collaborations can focus on high-impact areas like national security, infrastructure, applied research, and workforce development, helping to grow innovation and maintain U.S. leadership in AI.

The Honorable Nanette Barragan

 Dr. Schmidt, in March, I visited Space ISAC – Space Information Sharing and Analysis Center – in Colorado Springs. The Space ISAC team tracks and prevents cyber threats to space infrastructure. Their work keeps our satellites safe so that we can access the internet and use our phones.

Your testimony mentions space as a strategic frontier in the AI race and calls for Technology Competitiveness Council in the White House. This Council, as you say, would develop national action plans, coordinate agency efforts, and ensure collaboration with private sector leaders.

How could the Council partner with Space ISAC to develop AI tools that strengthen cybersecurity so that our internet or cell service is not impacted?

Response:

A Technology Competitiveness Council at the White House could serve as a strategic bridge between domain-specific efforts like those at Space ISAC and broader national AI and critical technology initiatives.

The Council would provide strategic guidance within and across critical technology sectors, including AI, biotechnology, cybersecurity, space, and others, and would help align federal priorities and build collaborative partnerships with industry, academia, and others on the frontlines of tech innovation.