TECHNET
THE VOICE OF THE
INNOVATION ECONOMY

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May 15, 2025

The Honorable Julie Fedorchak
1607 Longworth House Office Building
Washington, DC 20515

Re: TechNet Comments to the AI and Energy Working Group RFI

Dear Congresswoman Fedorchak and Members of the AI and Energy Working Group,

TechNet appreciates the opportunity to comment on the House Artificial Intelligence (AI) and Energy Working Group's request for information on strategies to secure a stable, affordable, and sustainable domestic energy supply capable of powering next-generation AI infrastructure. Over the coming decade, America's continued leadership in global innovation will depend on the availability of secure and reliable data center infrastructure and the energy resources and technology required to power it. We welcome the House AI and Energy Working Group's proactive efforts to explore how best to harness domestic energy resources, secure critical infrastructure, and advance policies to ensure the continued development of critical and emerging technologies and position the United States to lead the world in the AI era.

TechNet is the national, bipartisan network of technology CEOs and senior executives that promotes the growth of the innovation economy by advocating a targeted policy agenda at the federal and 50-state level. TechNet's diverse membership includes dynamic American businesses ranging from startups to the most iconic companies on the planet and represents five million employees and countless customers in the fields of information technology, artificial intelligence, e-commerce, the sharing and gig economies, advanced energy, transportation, cybersecurity, venture capital, and finance.

The future of U.S. global leadership and security is inextricably tied to our ability to continue innovating at the pace and scale necessary to remain ahead of our competitors and adversaries. Digitalization and the development of critical and emerging technologies like AI are rapidly increasing the demand for data storage, processing power, and the energy necessary to support and sustain current and future innovation. Data centers and infrastructure are now more critical to economic growth and technological development than ever before, as virtually all sectors of the economy increasingly rely upon them to access and manage their digital resources.

Many of TechNet's member companies are directly involved in driving the complex ecosystem that supports the availability of safe and secure data centers and infrastructure. This ecosystem encompasses everything from cloud services and telecommunications infrastructure to power generation and the availability of skilled engineers and technicians. TechNet's members remain committed to collaborating with the U.S. government to build a secure and resilient data ecosystem that supports critical infrastructure and national security, empowers communities, drives job creation, and solidifies America's competitive advantage in the global economy.

To win the global AI race, both the government and private sector must work together to advance a national policy agenda that secures American energy dominance and supports the construction of data and power infrastructure at a pace that allows U.S. innovation to move forward unimpeded. Speed and scale are the keys to maintaining America's technological advantage and positioning the U.S. to outcompete China and other authoritarian regimes in the AI era.

To that end, TechNet respectfully submits the following feedback and recommendations:

Invest in American Energy Dominance

Global power demand from data centers is forecasted to increase 50 percent by 2027 and by as much as 165 percent by the end of the decade.[1] This recent acceleration of data center growth, which in the U.S. is projected to increase by nine percent annually through 2030[2], is occurring at the same time as the reshoring of manufacturing in the U.S., as well as the electrification of buildings and transportation systems. Collectively, these trends, while driving innovation and societal progress, are also placing increased pressure on our nation's dated electrical grid and driving an unprecedented acceleration of energy demand that America is currently unprepared to meet.

To meet the accelerating demand for compute and energy, Congress and the Trump administration should invest in the next generation of energy technology and establish policies to expand the supply and access to existing sources of all types. To achieve this, a whole-of-government approach should be developed to map, optimize, and then manage the approval process for large-scale data infrastructure and projects dedicated to establishing new energy sources. This includes advancing sustainable and scalable sources such as next-generation nuclear fission, emerging fusion technologies, geothermal, and long-duration energy storage.

In particular, lengthy and complex permitting processes for advanced nuclear projects and geothermal drilling have created financial and technological barriers to increased investment in these important energy resources. We encourage Congress

[1] *AI to drive 165% increase in data center power demand by 2030*, Goldman Sachs, February 4, 2025.
[2] National Telecommunications and Information Administration, September 4, 2024.

to streamline National Environmental Policy Act (NEPA) requirements, reform the judicial review process, and expedite permitting processes for new energy projects. We also encourage Congress to maintain critical tax credits and other incentive programs to support and help de-risk new energy projects.

Incentivize Private-Sector Investment

Given the scale, duration, and capital cost of data centers and energy infrastructure, companies must have long-term certainty across a range of issues to sustain and power U.S. data center development. The availability of highly reliable, reasonably priced electricity, as well as access to support new renewable and carbon-free energy, are among the most pressing market considerations. However, access to construction labor and reasonable construction costs, efficient and clear regulatory environments, and favorable tax and fiscal policies are essential policy-related considerations for data and energy infrastructure expansion and modernization.

To compete globally and attract investment in data and energy infrastructure, Congress should reinstate and make permanent tax provisions that reduce the capital burden for infrastructure developers. This includes restoring full deductibility of R&E expenditures, which currently face a long amortization period that restrains the cash flow of innovative firms. Additionally, 100% bonus depreciation for qualified property purchases should be reinstated and made permanent, allowing investors to better align tax obligations with large upfront infrastructure costs.

Given the scale of investment required, private markets alone may not be sufficient to fund the next generation of AI infrastructure. The federal government can help fill this gap through tools like offtake purchase commitments and credit enhancements. Those mechanisms de-risk large-scale projects while encouraging alignment with public interest goals. The resulting infrastructure, such as the new energy sources needed to power AI data centers, would be considered strategic national assets.

TechNet also recommends the development of AI Economic Zones, created by local, state and the federal government together with industry. These zones would offer incentives for the creation of AI research hubs and significantly speed up the permitting processes for building AI infrastructure. These zones could include specialized infrastructure and regulatory frameworks, preferential land-use policies in strategic locations, and partnerships with local utilities to ensure sustainable power supplies. Further incentives could include research funding for innovative cooling technologies and energy management systems that optimize data center operations. Such zones could also facilitate the offtake of meaningful amounts of compute by public universities to scale the training of a homegrown AI-skilled workforce.

Modernize the Grid

In addition to updating U.S. energy policy and supporting the development of new energy resources, a resilient, reliable, and secure energy grid is essential for sustaining American AI innovation and meeting the needs of the broader digital economy. Current energy infrastructure is dated and will ultimately fail to meet our modern electricity needs unless government and industry work together to modernize the grid to accommodate more distributed and variable energy sources and ensure reliable and affordable access to energy nationwide.

Modernizing energy grids and streamlining related environmental and energy permitting regulations is essential to meeting the increasing demand for AI-related energy consumption. Within five years, training a leading AI model is projected to consume around five gigawatts of power.[3] Meanwhile, data centers face long delays connecting to power grids due to availability constraints and lengthy and complex permitting processes. The complex regulatory and approvals stack across local, state, and federal governments is a significant and unwieldy barrier that must be addressed. The private sector has the financial resources to build the required data and energy infrastructure, but governments at all levels must prioritize, coordinate, and streamline the pathway to bringing online the required data and energy infrastructure.

It is imperative that Congress urgently resolve the inefficiencies of the U.S. permitting process by passing comprehensive, bipartisan permitting reform legislation to address critical challenges faced by data infrastructure and energy projects. Although the 118th Congress made meaningful progress with the bipartisan *Energy Permitting Reform Act of 2024*, the legislation was not enacted. The 119th Congress should build on this effort and pass comprehensive permitting reform legislation to resolve the inefficiencies of the U.S. permitting process. Despite efforts by the executive branch to streamline permitting for data center and data infrastructure projects, only legislation can address critical challenges such as endless litigation and the complexities of permitting linear infrastructure projects that span multiple jurisdictions.

TechNet also recommends that Congress work with the Trump administration to grant greater authority to federal agencies to site and permit interstate transmission lines to streamline the approval process and prevent discriminatory state practices where necessary to support data centers and other AI infrastructure needs. Federal agencies should be tasked with streamlining permitting processes by accelerating reviews, enforcing timelines, and promoting interagency coordination to remove bureaucratic obstacles.

In addition to modernizing and expanding energy grids, Congress and the administration should support efforts to optimize the use of the existing grid. Cost

[3] Tim Fist and Arnab Datta, *How to Build the Future of AI in the United States*, Institute for Progress, October 23, 2024.

effective grid-enhancing technologies can get more capacity out of existing infrastructure simply by using the grid more efficiently. However, current regulatory frameworks disincentivize optimization. Congress should review regulatory compacts to move away from fixed returns based on dollar-for-dollar investments and instead encourage the use of grid-enhancing technologies in transmission and resource planning, including through shared saving mechanisms.
Grid-enhancing technologies combined with efforts to further reduce the energy loads on the grid is critical to meet the country's near-term AI energy demands, given timelines for the buildout of new transmission infrastructure. For example, initiatives such as the EPA's ENERGY STAR leverage AI-driven efficiency in consumer applications to reduce overall electricity consumption, ease grid stress, and lower energy demand at the consumer level to allow for more power to be allocated to AI data centers. TechNet recommends Congress work with federal agencies to develop similar programs that would strengthen demand response frameworks to manage facility usage at peak times, reduce stress on the grid, and equip energy and grid infrastructure with solutions to promote efficient and reliable power delivery.

Digital solutions can provide smart monitoring and energy management capabilities for intermittent and distributed generation to ensure efficient and reliable power delivery, advanced analytics to manage load shedding and peak shaving, and automated data collection to reduce maintenance costs. Data centers can also reduce energy costs and maximize resources with energy-efficient technology. To this end, the federal government should promote the use of energy-efficient IT equipment in data centers (e.g., routers, servers, and processors) and complementary operational technology to help reduce energy consumption and lower the costs of AI workloads. This should be a priority for all new data center capacity, but there is also an opportunity to reap the benefits of energy-efficient technology by modernizing legacy systems.

Overall, the U.S. Government should adopt a dual approach that accelerates energy acquisition but also enhances the efficiency of technology infrastructures supporting AI. Initiatives that enhance the efficiency of data center hardware and software, optimize algorithms for reduced computational load, and foster research into computing paradigms that minimize energy consumption should be prioritized.

Outpacing China

The next several years will determine the outcome of the global AI race. The Chinese Communist Party is leveraging the full extent of its power and resources in a whole-of-country approach to supplant the U.S. as the global leader in AI and innovation. To maintain its global AI dominance, the U.S. must invest heavily in developing the infrastructure, energy, supply chains, resources, and human capital that underpin AI innovation and move quickly to dismantle regulatory barriers that threaten our ability to move at the scale and speed required to outmatch Chinese efforts.

In addition to modernizing the grid and data infrastructure, updating U.S. energy policy, and streamlining related environmental and energy permitting regulations, Congress must continue to prioritize policies to increase our domestic manufacturing capabilities of critical technologies, enhance our R&D capabilities, and strengthen supply chains to preserve our competitive advantage.

Boost Domestic Manufacturing

Incentivizing the further buildout of domestic manufacturing capacity, particularly in leading-edge chips, is critical to national security and to maintaining U.S. technology leadership, including in AI. Congress and the Trump administration must work together to promote long-term American competitiveness and ensure an even playing field for semiconductor fabrication in the United States by extending advanced manufacturing investment credits under the *CHIPS and Science Act*, which have already led to more than 90 new projects across the U.S., totaling more than $500 billion in private investment and creating more than 58,000 direct jobs in America. As a result of these new investments, U.S. production of the advanced logic chips needed to power AI has finally begun. Extension of the advanced manufacturing investment credit past its current December 31, 2026, expiration date will be needed to secure further growth in domestic advanced chip manufacturing. Additionally, the U.S. Government should ensure that trusted foreign companies that are investing domestically have fair access to data center capacity and energy infrastructure to further encourage global AI firms to invest in the United States.

Invest in R&D and Workforce Development

America has long been the global leader in foundational technology research and development. As nations like China work to outcompete America in AI and emerging technologies, it is critical that we strengthen our investments not only in AI research and development (R&D) but also basic research and the broader scientific ecosystem. This includes funding national research infrastructure to provide AI researchers and students with greater access to complex resources, data, and tools needed to develop AI. It also requires robust funding for programs such as the Department of Commerce's Economic Development Administration's Regional Innovation and Technology Hubs Program, the National Institute of Standards and Technology's (NIST) laboratories, and the Department of Energy's Office of Science, which will ensure innovation, workforce development, and economic development are catalyzed and spread throughout the entire country. In addition to strengthening domestic AI research and development, the government should work with trusted partners to foster stronger international AI research collaborations that will help the U.S. maintain its competitive edge while ensuring that AI ecosystems remain anchored in the United States.

We must also strengthen our domestic STEM talent pipeline. According to the House China Select Committee, the Chinese Communist Party has invested heavily in

STEM education and is producing more research on AI and as many as five times the number of STEM graduates as the U.S. American students and adults need high-quality, widely accessible STEM and workforce education and training programs at all levels to give them the tools they need to succeed. Federal, state, and private investments in computer science, core STEM competencies, and related programs from early childhood through high school and beyond will produce immense returns for American technological innovation. Many TechNet members are currently providing upskilling opportunities for individuals looking to enter the technology economy, and we would like to remain partners with federal and state governments to design effective workforce programs.

Lead International Engagement

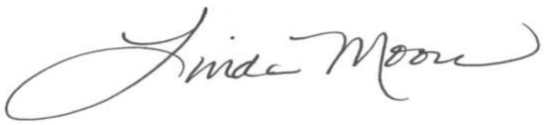
To ensure AI development aligns with democratic values rather than authoritarian controls, the United States must lead international efforts to establish shared understandings of frontier AI risks and coordinate on standards and security best practices. We must drive global consensus in support of a U.S.-led framework for international AI standards and definitions that enables regulatory coherence and global adoption. This includes working closely with trusted partners and allies to harmonize AI standards and regulations to ensure that misaligned regulatory frameworks do not create unnecessary barriers to AI adoption, increase compliance costs, or slow innovation. American competitiveness relies on U.S. companies being free to expand, compete, and integrate AI solutions globally without facing unnecessary regulatory barriers. However, the emergence of inconsistent and overly restrictive AI regulations in various countries creates significant challenges for American innovation. These disparate regulatory approaches increase development costs, complicate deployment, and ultimately restrict U.S. companies' ability to fully participate in international markets. The resulting limitations on American AI products and services in global markets threaten to undermine U.S. dominance in digital innovation and weaken our competitive position against strategic rivals who are aggressively advancing their own AI capabilities. A harmonized international regulatory approach will allow AI developers and deployers to operate more efficiently across jurisdictions while maintaining high safety and security standards.

The U.S. Government should actively engage foreign nations, particularly in the EU, to push back against harmful and overreaching regulations, prevent non-tariff trade barriers on AI models, and ensure foreign markets are open to American business. This international engagement strategy should protect U.S. market access and promote an innovation-oriented approach, including advocating for adherence to international consensus-based technical standards, the use of existing regulatory frameworks where possible, and AI-specific rules only where gaps exist. It should also promote innovation-enabling policies like open government data and cross-border data flows while opposing forced data localization and protecting AI’s algorithmic and source-code integrity.

Conclusion

TechNet applauds the House AI and Energy Working Group's inclusive effort in gathering diverse stakeholder perspectives to inform its legislative and policy recommendations for maintaining U.S. leadership in AI innovation and energy production. Moving forward, we remain eager to collaborate with the Working Group and Congress on these critical issues.

Sincerely,



Linda Moore
President and CEO