THE GREENLINING INSTITUTE

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March 13th, 2025

Office of Science and Technology Policy
1600 Pennsylvania Ave NW
Washington, DC 20500

Re: Development of an Artificial Intelligence Action Plan
Docket No. NSF_FRDOC_0001-3479

The Greenlining Institute appreciates the opportunity to provide comments to the Office of Science and Technology Policy's Request for Information in regards to the Development of the Artificial Intelligence Action Plan. As our federal government moves forward and builds anew to fit the needs of this digital-first era, we are hopeful that our policy recommendations will highlight how our shared goals to create prosperity and wealth for *all* Americans can be achieved through careful, deliberate, and equitable policymaking.

The Greenlining Institute works to build a future where race is never a barrier to economic opportunity. For over 30 years, we have built a proven track record in accomplishing this goal. From passing the Community Reinvestment Act in 1978—which has supported banks in facilitating the growth of wealth and prosperity in formerly redlined communities—to creating pipelines that help people of color become successful small business owners, we have been at the frontline building a more just economy. Our work in technology equity has increased broadband access to low-income communities throughout the United States and informed financial institutions on the responsible use of AI and alternative data.

President Donald Trump's Executive Order on AI has created a federal landscape that positions American industry leaders to create the world's leading innovations in artificial intelligence. We commend the goals that were laid out in the President's 2020 Executive Order on AI: to create AI for American innovation, AI for American industry, AI for the American worker, and AI with American values. In order to ensure that the American people are able to reap the benefits of these goals, however, we believe that it is imperative that we create a regulatory framework that will promote a sustainable, competitive, and equitable environment. We can only win if the rules of the game are laid out clearly and fairly. Therefore, we implore the Administration to consider the following policy recommendations.

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I. Energy Efficiency & Sustainability

Our pursuit of innovation is limited by our material conditions. For AI, that material limitation is energy. Scientists anticipate that our global supply of nonrenewable energy sources, such as fossil fuels and oil, will be depleted within 30-70 years.[1]

As AI's demand for energy increases, our production of the fossil fuels needed to power these data centers will be dramatically strained. The International Energy Agency estimated that global electricity demands from AI data centers will double between 2022 and 2026.[2] In the United States, where the majority of our data centers are still fueled by nonrenewable energy sources, our claim to the share of the pot will shrink. Inevitably, we will fall behind other countries that have already transitioned to more sustainable energy sources.

If left unhindered, the cost of this strain will be paid for by working American families who have no choice but to pay their rising energy bills at the end of each month. We saw this when New York households and small businesses paid an extra $204 million and $92 million annually, respectively, because of increased electricity consumption from cryptominers.[3] The Mid-Atlantic regional grid, where several data centers are housed, is projected to see rate increases of up to 20% by this year; between 2024 and 2025, their grid operators went from paying $2.2 billion for power to $14.7 billion.[4] We saw how AI's water depletion led to a devastating strain on California's disaster response during the wildfires.[5] When coupled with the fact that these data centers are more likely to be built near low-income communities and communities of color, we see these effects disproportionately impacting our most vulnerable American families.[6] These impacts are dangerous, pervasive, and inequitable. The race to the bottom will not be against other nations—the race will be against ourselves.

Sustainable AI development must match the pace of sustainable energy development; clear executive direction and deliberate regulatory guidance is key to accomplishing this balance. In just a few short decades, China went from being the world's largest emitter of greenhouse gases

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[1] https://mahb.stanford.edu/library-item/fossil-fuels-run/
[2] https://iea.blob.core.windows.net/assets/6b2fd954-2017-408e-bf08-952fdd62118a/Electricity2024-Analysisandforecastto2026.pdf
[3] https://bfi.uchicago.edu/insight/research-summary/when-cryptomining-comes-to-town-high-electricity-use-spillovers-to-the-local-economy/
[4] https://opc.maryland.gov/Portals/0/Files/Publications/RMR%20Bill%20and%20Rates%20Impact%20Report_2024-08-14%20Final.pdf?ver=V9hZfyTmjLeNVt2Dg3cTgw%3D%3D
[5] https://fortune.com/article/how-much-water-does-ai-use/
[6] https://gradientcorp.com/trend_articles/impacts-of-large-data-centers/#:~:text=Typically%2C%20data%20centers%20are%20built,jobs%20beyond%20the%20construction%20phase.

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by volume to being the world's leading producer of renewable energy. They were able to accomplish this by creating strategic investments in solar, wind, green hydrogen, and geothermal projects.[7] Today, China has more than 80% of the world's solar manufacturing capacity. Through executive direction, the country has been able to dominate the field and position itself as the sustainable global supplier of goods in an increasingly carbon-strained world.[8] One of these goods, evidently, being AI.

We can be a leader in powerful, sustainable AI by creating regulations that mimic future conditions. If tomorrow's landscape requires AI that runs on limited energy, then today's developers should be building AI that runs on limited energy. Furthermore, by investing in our green infrastructure and reducing AI's energy consumption, we reduce our reliance on foreign oil and risks of energy disruption. Sustainability, efficiency, and affordability should be a point of pride in American innovation—our AI Action Plan can reflect that. Therefore, we propose the following recommendations:

1. ***Embolden the National Institute for Science and Technology to create standards for AI energy efficiency*** — *The NIST should provide information to developers and consumers on which systems are most efficient. Look to the EU Energy Efficiency Directive, which dictates standby power limits, ecodesign requirements, energy labeling, and data center regulations, including the Power Usage Effectiveness (PUE) ratio.*[9]

2. ***Require that AI developers and data centers record and disclose their annual AI energy consumption*** — *This data ought to be publicly accessible and used to inform the NIST energy efficiency recommendations. Developers will be motivated to consider energy efficiency in their design, acquire testing and certification to ensure that their devices meet required efficiency standards, and comply in order to gain market access.*

Businesses may argue that these common-sense regulations unnecessarily hinder innovation. We know, however, that innovation can thrive when we enact smart regulations that realistically prepare entrepreneurs for the future. We can create regulatory frameworks that anticipate the market's energy constraints and provide clear, smart rules that will guide innovation. When early ARM chips were unable to compete with Intel on raw power, Apple pivoted and eventually created the chips that would sit in our iPhones. When SpaceX underwent budget restraints,

[7] https://e360.yale.edu/features/china-renewable-energy
[8] https://policy.asiapacificenergy.org/node/37
[9] https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficiency-targets-directive-and-rules/energy-efficiency-directive_en

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they designed reusable rockets that led to more cost-efficient space travel and the creation of Falcon 9. When Chinese developers were denied access to high-end American chips, they were forced to optimize their model architecture to create a more energy-efficient AI alternative: Deepseek. These types of constraints foster smart, efficient, and more sustainable solutions.

More Fair and Accurate Systems

The United States' strength is rooted in its diversity. We are a nation that is the culmination of countless ideas, cultures, perspectives and experiences—these are the fuel to groundbreaking innovation. This also means that our AI systems must work accurately across racial, ethnic, class, gendered, and cultural lines.

Eliminating ideological bias or engineered social agendas within AI means creating more accurate, less biased systems. The Greenlining Institute has been working to accomplish this mission for over five years. We understand that algorithmic bias against vulnerable households—low-income families, Americans living in formerly redlined zip codes, communities of color, working Americans with disabilities, and other groups not accurately reflected in training datasets—can lead to disparate impacts.[10] Incomplete and inaccurate datasets reinforce existing biases and historical inequalities. Poorly designed models built on inaccurate data sets do not paint an accurate picture of our current realities. Every statistician, developer, and data analyst knows the age-old adage: garbage in, garbage out. If we want to be a global leader in AI, we need to create regulatory guardrails that ensure that the AI we build is better than garbage.

In order to ensure that our AI does not operate with ideological biases, our systems must adhere to a standard of explainability. The market reflects this sentiment: across party lines, Americans want to be able to trust AI systems by learning what is happening underneath the hood.[11] They want answers to questions like, "What factors were used to make this decision?", "Where did the model get the data to make this prediction?", or "What can I do to contest this decision?" Additionally, explainability requirements promote transparency and deliberate design: when developers are required to disclose their models' decision-making logic, they are less inclined to imbue the model with their own biases or create models that are too complicated to explain. This builds trust between consumers and developers, facilitating the equitable, safe, and accurate adoption of American automated decision-making systems.

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[10] https://greenlining.org/publications/algorithmic-bias-explained/

[11] https://www.brookings.edu/articles/making-ai-more-explainable-to-protect-the-public-from-individual-and-community-harms/#:~:text=We%20also%20need%20to%20know,of%20automated%20decision%2Dmaking%20tools.

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Furthermore, American companies miss out on *significant market opportunities* when they build AI systems that exclude communities of color. Traditional credit scores, for example, have historically excluded over 26 million Americans from accessing loans due to their restrictive credit scoring models.[12] When a risk-assessment algorithm is only trained to determine creditworthiness based on traditional, outdated data points—i.e. debt-to-income ratios, length of credit history, credit mix, etc.—then the portion of the market that the lender is able to service is significantly limited. Fintech companies like Block and Plaid, however, have taken advantage of this significant market gap by creating more inclusive and accurate models: their Alternative Credit Models factor in alternative data points, including gig economy data, rent payment history, spending patterns, and nontraditional assets.[13] This intentional effort to expand financial inclusion in their AI models has significantly expanded the Block's ability to serve the 20-25 million underbanked Americans in the United States. Their commitment to investing $100 million in Community Development Financial Institutions and Minority Depository Institutions has further informed their ability to create models that can identify creditworthiness by nontraditional means.[14]

If US guidelines for explainability and impact testing do not reach the regulatory standards upheld by the European Union, then we will never achieve American AI leadership. Clear regulations that enhance the quality and accuracy of our AI are key to establishing trust, access, and adoption in the global market. The EU AI Act should be the baseline. This has been demonstrated in Tesla's diminishing claim to the global EV market share. European regulatory standards have consistently outpaced the American landscape. As people around the world lose faith in Teslas' safety features, consumer anxieties and regulatory dissonance slow down the adoption of American technology abroad. In the last month alone, these concerns have led to Tesla stock dropping over 8% and European sales dropping by nearly 50%.[15] This leaves more than enough room for our competitors from China to step in. Today, Chinese EVs account for 8 of the top 10 best-selling EVs worldwide, with BYD growing its market share to 5%.[16] The EU's market holds $20.3 trillion in GDP. If we are unwilling to harmonize our regulatory guidelines to that of Europe, we will continue to miss out on our share of this pot.

Lack of regulatory oversight also means stunted adoption *within* the United States. The US's trailing adoption of contactless payment demonstrates this. By the early 2010s, the technology

[12] https://www.consumerfinance.gov/about-us/blog/who-are-credit-invisible/
[13] https://plaid.com/resources/lending/alternative-credit-data/
[14] https://block.xyz/block-impact-investments
[15] https://www.morningstar.com/news/marketwatch/2025022573/tesla-sales-slid-by-nearly-50-across-europe-at-the-start-of-2025
[16] https://autovista24.autovistagroup.com/news/byd-enjoys-significant-lead-in-global-ev-market/

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for contactless payment had been swiftly adopted by countries like Australia, UK, Czech Republic, Brazil, and Hong Kong. In European countries, tap-to-pay accounted for 92-97% of Visa transactions in 2017.[17] This was in large part due to the proactive role that the EU took in adopting the Payment Services Directive, which implemented regulatory guardrails in the adoption of this technology, like transaction limits and chip standardization.[18] Meanwhile, in the United States, tap-to-pay payments accounted for only .6% of our transactions prior to the pandemic. Without regulatory guardrails, business and consumers were anxious at the thought of adopting this new, risky technology. When the Covid-19 pandemic hit, American businesses and consumers were starkly unprepared and left behind in the global transition to contactless payment. If we want to be the global leaders in AI, we cannot be falling behind within our own country. We need guardrails that make consumers and businesses confident about taking on the risks that accompany these emergent technologies.

Clear regulatory guidelines guide businesses in their embrace of innovation. The CFPB's shift away from No-Action Letters, for example, presents the new Administration with an opportunity: in order to limit government waste on retroactive enforcement, federal agencies ought to implement *proactive* and *preventative* measures that ensure the safe, equitable, and accurate development of AI. Strong regulatory actions will set a high standard for American AI across the board. Therefore, we propose the following recommendations:

1. ***Establish Data Transparency and Quality Standards*** *— Develop a robust data governance framework that defines data quality standards, processes, and roles. This helps create a culture of data quality and ensures that data management practices are aligned with organizational goals. These standards should include a commitment to accuracy, consistency, completeness, timeliness, and relevance, especially as they relate to communities of color and other vulnerable populations which may not be accurately represented in existing data.*

2. ***Establish Explainability and Accountability Standards*** *— Automated systems that are responsible for making life-impacting decisions ought to be reasonably explainable and their decision-making logic should be made public to consumers. Regulatory bodies should develop frameworks that guarantee individuals the right to challenge and seek redress for decisions made by these algorithms, including a private right of action or the option to opt out of automated decision-making.*

[17] https://caribbean.visa.com/visa-everywhere/innovation/contactless-payments-around-the-globe.html
[18] https://www.globalpayments.com/insights/2021/09/30/everything-you-need-to-know-about-contactless-payment-limits#:~:text=Countries%20in%20the%20European%20Union,the%20payment%20the%20first%20time.

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3. ***Regularly Conduct Impact Assessments*** *— Harmonize US regulatory AI standards to that of other nations in order to encourage global adoption and consumer trust. This should include regular reviews and updates in order to ensure that AI systems are accurately and fairly serving diverse populations. Regulatory agencies ought to be granted the authority to fine developers that fail to pass their impact assessments and prevent them from entering the market.*

Government Efficiency and Waste

Our federal and state governments are operated by diligent and experienced career employees. The Greenlining Institute firmly believes that the work carried out by regulatory agencies and administrative departments are essential to protecting the rights of the American people. Reckless automation will not save government time or resources. However, we acknowledge the Administration's push to automate these processes and usher in a new future for our government systems. We believe that, in order to prevent the accumulation of additional government waste, it is imperative that the Administration implements strong procurement standards for automation.

Reckless automation will waste government time, money, and resources. We have seen this before. In Michigan, state officials set out to design an automated system that would replace government workers in the Michigan Unemployment Insurance Agency. They procured a system known as MiDAS, the Michigan Integrated Data Automated System. With minimal regulatory oversight or comprehensive security management, the state developed an algorithmic decision-making model that would eliminate over 400 government workers, or one-third of the UIA staff.[19] After $44,400,558 and 26 months, the MiDAS system resulted in a massive failure: from October 2013 to August 2015, the system issued over 60,000 fraud determinations with a 93% error rate.[20] When this system was finally halted and brought to court, the state was forced to pay a $55 million fine and return all of the money they had wrongly collected from applicants. All of this government waste could have been easily circumvented had Michigan incorporated strong procurement standards for their automated systems in the first place.

Well-designed automation, however, has the potential to effectively streamline processes and offer higher quality services to citizens. In order for this to happen, these efforts ought to be

[19] https://audgen.michigan.gov/finalpdfs/15_16/r641059315.pdf
[20] https://spectrum.ieee.org/michigans-midas-unemployment-system-algorithm-alchemy-that-created-lead-not-gold

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grounded in the realities faced by Americans. This means creating systems that provide options for vulnerable communities. In Australia, when government officials wanted to automate a punitive debt collection system, they understood that many segments of the population would not be able to realistically pay their fines. This included people facing health, financial or domestic hardship, people experiencing homelessness, people involved in the criminal justice system, and young people. In anticipation of this, they designed the NSW Revenue Vulnerability Model.[21] This model identified these most vulnerable individuals and—rather than allowing the fines to accumulate only to never be paid—directed them to *alternative* options, including repayment agreements or an implementation of a Work and Development Order. The Australian government prevented the system from breaking down by combining an automated system with a human appeals process. They understood that these automated decision-making systems would not work for everyone and, accordingly, created a more efficient model that could anticipate these outcomes. Maintaining human-in-the-loop decision-making processes prevent vulnerable individuals from falling through the cracks. Our AI models ought to take this proactive approach: models that determine life-impacting decisions should be able to also identify which individuals may need additional support. Our procurement standards should reflect this in order to create better, more efficient automated systems.

Strong government procurement standards can guide and incentivize innovation. Government agencies can develop frameworks that encourage developers to create new products and services that better serve government needs as well as that of the public. The excess of red tape and lack of clarity in government procurement standards can drive up the cost for developers seeking to create high quality automation systems, meaning that only large players who can afford the regulatory moat are able to participate. The Department of Homeland Security's Procurement Innovation Lab, however, emphasizes that procurement elements like innovation-focused evaluation criteria, staged funding for R&D, early market engagement, and flexibility in contract terms that allow for experimentation and adaptation can drive up the value of government innovation.[22] Clear procurement standards encourage developers to enter the market. Market diversity and competition will inevitably lead to the development of higher quality, more accurate, more equitable, and more energy-efficient products that maximize government efficiency.

Automation, furthermore, should be paired hand-in-hand with significant investments in reskilling and education. If we are to be a nation that leads in innovation and progress, our

[21] https://www.ombo.nsw.gov.au/__data/assets/pdf_file/0004/138208/The-new-machinery-of-government-special-report_Annexure-A.pdf
[22] https://www.dhs.gov/pil#:~:text=The%20Procurement%20Innovation%20Lab%20

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displaced workers can be the minds that lead the charge. Significant investments in labor reskilling and AI education can push us forward. In the past year, China has already gotten a head start: the Chinese Ministry of Education has committed to strengthening AI education in primary and secondary schools.[23] Their approach prioritizes bridging the gap between education in rural and urban schools. This nationwide initiative is one that can only take place through a concerted and coordinated effort. The United States Department of Education ought to be emboldened to implement AI literacy curriculum to our students across the country. California's commitment to teaching AI literacy in schools, for example, will empower young students to better understand these systems while giving them the tools to push our nation forward.[24] We need to be able to accomplish this on a national level.

A commitment to government efficiency means that we ought to work smarter, not harder. This means that our leaders need to be able to anticipate how these AI systems will impact real people and, therefore, encourage the development of systems that work for real people. We recommend the following policy proposals for the AI Action Plan:

1. ***Maintain technical AI expertise in the federal government*** *— Technical competence is vital to ensuring that these systems are implemented effectively and efficiently. By maintaining Chief AI Officers across the federal government, American tax dollars are saved and automated systems will be implemented in each department with the necessary expertise and experience. In the Department of Defense, for example, the Chief Data and Intelligence Officer has been able to effectively streamline the adoption of responsible AI by combining institutional knowledge and technical expertise.*

2. ***Targeted Design and Procurement Standards*** *— Policymakers should ensure that automated systems in the federal government use comprehensive, data-driven criteria to allocate resources. Procurement contracts should encourage developers to design models that account for a broad spectrum of needs, ensuring that resources are directed where they will have the greatest impact, as defined in consultation with a diverse group of stakeholders. See our report on Equitable AI in Government for additional procurement recommendations.*[25]

[23] https://www.globaltimes.cn/page/202412/1324230.shtml
[24] https://a23.asmdc.org/press-releases/20241003-california-teach-ai-literacy-every-grade#:~:text=SACRAMENTO%2C%20CA%20%E2%80%94Governor%20Newsom%20has,K%2D12%20students%20in%20California.
[25] https://greenlining.org/wp-content/uploads/2024/12/GLI_Equitable-AI-in-Government_6.pdf

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3. ***Ensure that any models used to allocate government resources are built with vulnerability assessment models*** *— These vulnerability assessments are key to minimizing government waste. Models should be trained to identify historical and present-day barriers to access, especially if gaps exist in the data. This includes the consideration of income, race, gender, ability/disability, housing, age, veteran status and other indicators of vulnerability. Models should be able to direct individuals to alternate options and include human oversight in the decision-making process.*

AI for Efficiency, Accuracy, and Equity

The United States has the potential to become the world's foremost leader in artificial intelligence. As this Administration considers our next steps forward, The Greenlining Institute implores the Office of Science and Technology Policy to consider the long term benefits that result from implementing these recommendations. Leading in AI means leading in efficiency, accuracy, and equity. In order to better serve the American people, allow all of our communities to reap the benefits of artificial intelligence, and lead the way for all other nations, we must commit to these principles.

The Greenlining Institute is committed to creating a just future that works for all. This means ensuring that our technology works for all. We look forward to additional opportunities to engage with the Administration on the next steps of the AI Action Plan.

Sincerely,

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