**Submission to NIST Calls for Information on Response to Executive Order on Artificial Intelligence // Climate Action Against Disinformation Coalition // February 2, 2024**

Climate Action Against Disinformation (CAAD) is a coalition of 20+ leading climate and anti-disinformation groups committed to combating disinformation about climate change. We thank you for soliciting comments regarding the Biden administration’s executive order on artificial intelligence.

AI risks turbocharging climate disinformation and dramatically increasing carbon emissions.

Voters on both sides of the political spectrum, according to [a poll](https://foe.org/wp-content/uploads/2023/12/AI-Poll-Dec-2023-Summary.pdf) conducted by Data for Progress, agree that the government should consider the energy usage and climate disinformation implications of AI. In the comment below, we recommend five regulatory principles to guide the approach to regulating AI.

**The AI Threat to Climate Disinformation**

CAAD and other researchers have documented extensive examples of the harms of climate disinformation spread on social media in the U.S. that we believe could each be worsened by the onset of AI, including these: the [overall rise](https://www.thetimes.co.uk/article/twitter-elon-musk-climate-change-denial-bclrx7nv9) in the amount of climate disinformation, [early failures within ChatGPT4](https://insideclimatenews.org/news/31032023/ai-can-spread-climate-misinformation-much-cheaper-and-faster-study-warns/) to not prevent climate disinformation, [algorithmically enhanced lies](https://foe.org/news/facebook-study-climate-disinformation/) that falsely blame oil & gas infrastructure failures on wind power, the [monetization of climate disinformation](https://www.nytimes.com/2023/05/02/technology/google-youtube-disinformation-climate-change.html), false claims linking [wind power and whale deaths](https://www.mediamatters.org/facebook/misinformation-about-recent-whale-deaths-dominated-discussions-offshore-wind-energy), and the [algorithmic prioritization of climate denial](https://www.isdglobal.org/isd-publications/deny-deceive-delay-vol-2-exposing-new-trends-in-climate-mis-and-disinformation-at-cop27/) narratives during global climate negotiations. Artificial Intelligence has already contributed to discriminatory outcomes when it has been used in the areas of [policing](https://daily.jstor.org/what-happens-when-police-use-ai-to-predict-and-prevent-crime/), [housing](https://www.technologyreview.com/2020/10/20/1009452/ai-has-exacerbated-racial-bias-in-housing-could-it-help-eliminate-it-instead/), and [employment](https://www.techtarget.com/searchhrsoftware/news/252518184/Federal-warning-on-AI-hiring-bias-now-comes-with-teeth).

For decades, the United States has required a broad range of companies to prove their products are safe before entering use, and AI should be no different. Pharmaceutical companies must conduct clinical trials. Vehicles are tested by the National Highway Traffic Safety Administration. Planes are certified by the Federal Aviation Administration. AI represents as large a risk as previous technologies, and that risk should be similarly addressed.

We recommend that the United States government assess generative artificial intelligence witha systems-wide approach to the health, integrity, and resilience of the information ecosystem, including any impacts that could increase disinformation on climate change.

**Avoid Repeating the Mistakes of Social Media**

AI’s accessibility represents the second time this century that technology will usher in widespread social change. In the mid-2000s, social media was introduced in a largely unregulated manner, with far-reaching [negative consequences](https://www.cnn.com/2024/01/31/tech/big-tech-executives-senate-hearing-teens/index.html)that we see widely today. Services soon became monetized through invasive surveillance and tracking of their users. The [AI Blueprint for an AI Bill of Rights](https://www.whitehouse.gov/ostp/ai-bill-of-rights/) notes that social media “data collection has been used to threaten people’s opportunities, undermine their privacy, or pervasively track their activity—often without their knowledge or consent.” The Federal Trade Commission believes many companies broke the law in their attempts to restrict competition.

Social media’s trajectory was not inevitable. It was shaped by a broad range of policy choices and federal and congressional inaction. Artificial intelligence should not be next in a string of Silicon Valley products that are allowed to “move fast and break things,” especially when those things include the planet and its 8 billion people. Policymakers must use this opportunity to not repeat the mistakes of the past, especially with a technology that is far more powerful than social media. The extraordinary ability of AI to tailor-make and target disinformation to individual users raises concerns over privacy, and potentially massive disinformation generation campaigns could subvert essential, science-based discourse about the imperative to take climate action.

**The Energy and Climate Impact of AI**

Beyond the danger that AI disinformation presents, the creation and use of large language models is itself a climate danger. GAI systems demand a lot of energy at a time when the world must dramatically reduce carbon output. A Google chairman in 2023 said that each new AI search query has [10x the energy costs as a previous search](https://www.reuters.com/technology/tech-giants-ai-like-bing-bard-poses-billion-dollar-search-problem-2023-02-22/). OpenAI’s CEO said in 2024 that AI will use vastly more energy than people expected. Researchers estimate that the [carbon emitted](https://www.wired.com/story/the-generative-ai-search-race-has-a-dirty-secret/) to train a large AI language model is equivalent to driving from San Francisco to New York 550 times. On an industry-wide level, the International Energy Agency estimates the [energy use from data centers that power AI will double in just the next four years](https://www.iea.org/reports/electricity-2024/executive-summary), consuming as much energy as Japan. Such consumption could more than offset potential savings.

**Regulatory Recommendations**

Artificial intelligence should be subject to regulation similar to most other American industries, from airlines to pharmaceuticals. As we have seen with social media, the window to regulate is before new products enter widespread use, not after. This is especially true given AI’s potential for self-development post-release, including its ability to spread climate disinformation more effectively.

For this reason, we urge that the implementation of the administration’s executive order require the following:

1. Safety be proven beforerelease, including through these steps:
   1. AI companies’ release of plans that identify and prevent harm, including the spread of climate disinformation and other harms, before product release.
   2. Vigorous safeguards against mass-producing disinformation, fraud, and hate designed to manipulate human emotions.
   3. Explanation of how AI models produce their information, measure their accuracy, and show their sourcing.
   4. Adherence to community content standards that include detecting misuse of AI and enforcing standards against its misuse.
   5. Assessments of the health, integrity, and resilience of the information ecosystem, conducted by a multi-agency task force that considers how the proliferation of GAI might further erode trust in science, harm young people’s mental health, increase hate speech, and accelerate the power of digital gatekeepers, as well as how our regulatory systems could adapt to new GAI systems and potential threats before release.
   6. Assessment of threats to individual privacy.
2. Company AI systems are transparent, including through these measures:
   1. Regular reporting on existing and potential harms, which should extend to updates and changes in product design.
   2. Allowing researchers and academics to access how the technology functions and is used.
   3. Publishing a description of the dataset or corpus used to train the GAI model, explaining any principles used for including or excluding information and the source materials for query responses. And publishing any principles, constitutional directives, or guardrails used during training to align the models with human values.
3. Companies obtain consent for using [copyright-protected](https://www.theverge.com/2023/2/6/23587393/ai-art-copyright-lawsuit-getty-images-stable-diffusion) images or [community-owned](https://techpolicy.press/an-indigenous-perspective-on-generative-ai/) data for large language model training. Government develops rules for “fair use” in cases where AI models are summarizing copyrighted texts.
4. Companies and their executives are held accountable and liable for their products’ harms, recognizing that AI should not receive any liability protection offered by Section 230 of the Communications Decency Act and that the public has recourse against companies that spread disinformation by artificial intelligence.
5. AI systems publish regular and detailed energy usage reports for their systems.
6. AI companies are required to assess and report on [the environmental and social justice implications](https://www.brookings.edu/articles/the-us-must-balance-climate-justice-challenges-in-the-era-of-artificial-intelligence/) of developing their technologies.
7. That until these essential protections are in place, a federal moratorium is placed on any new public AI deployment.