

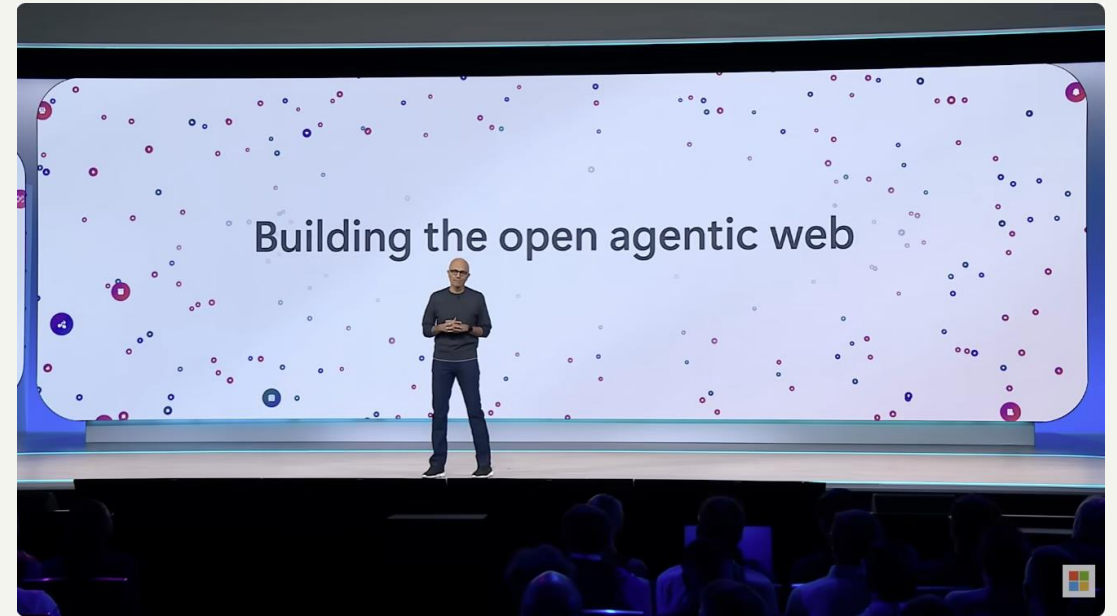
Big AI's climate futures

*From discursive alignment to
green conditions*

The rise of Big AI

“It is crucial to theorise and closely monitor the **industrialisation of AI**, a phenomenon characterised by its **pervasive expansion and integration across industries and sectors**, extending far beyond traditional computing” (2)

- Van der Vlist, Helmond & Ferrari (2024)



Satya Nadella, Microsoft Build 2025

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ARTIFICIAL INTELLIGENCE

AI's emissions are about to skyrocket even further

Data center emissions have tripled since 2018. As more complex AI models like OpenAI's Sora see broad release, those figures will likely go through the roof.

By James O'Donnell December 13, 2024



From Mexico to Ireland, Fury Mounts Over a Global A.I. Frenzy

As tech companies build data centers worldwide to advance artificial intelligence, vulnerable communities have been hit by blackouts and water shortages.

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270

By Paul Mozur, Adam Satariano and Emiliano Rodríguez Mega

Paul Mozur reported from Santiago, Chile, and Querétaro, Mexico. Adam Satariano reported from Ennis, Ireland, and Querétaro. Emiliano Rodríguez Mega reported from Querétaro.

Oct. 20, 2025

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TECH GIANTS

Countries are struggling to meet the rising energy demands of data centers

Mexico's lagging energy grid is forcing companies, including Microsoft, to use generators.

Massive Amsterdam Microsoft data centre gets green light

January 27, 2026



Photo: Depositphotos.com

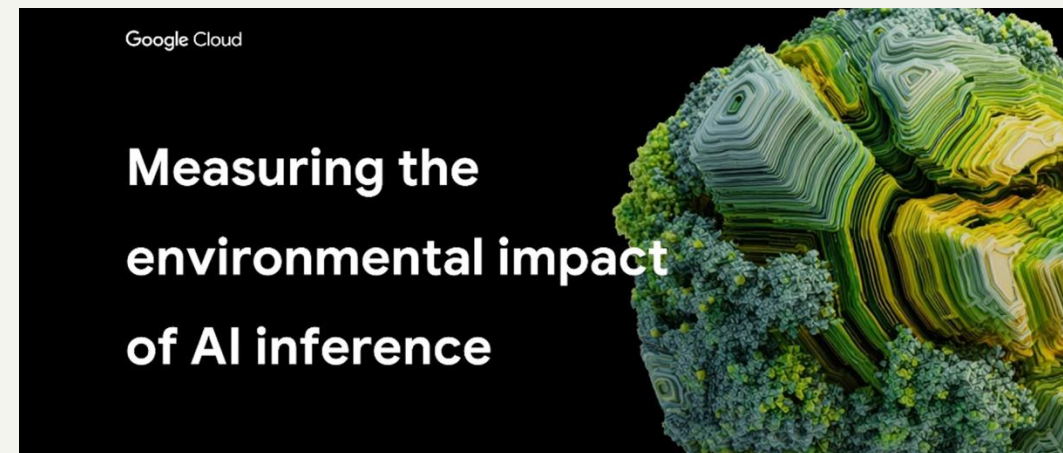
A massive new data centre planned for Amsterdam's western port area will be rented entirely by Microsoft and use as much energy as the city of Haarlem, according to [research by the NRC](#).

What discursive, geopolitical and market-related strategies does Big AI use to shape climate debates?



"We remain pragmatically optimistic because of the promise of new sustainability technologies, innovations in AI, and market solutions that are emerging which can accelerate progress across challenging sectors."

Microsoft sustainability report 2025



Google Cloud website 2025

Riemens, R. (2025). "Greenwashing Silicon Valley: The legitimization of green platform capitalism through tech-on-climate discourse." *Big Data & Society*. DOI: 10.1177/20539517251389853.

Advance Sustainability

Accelerating Sustainability with AI: A Playbook



 Microsoft

November 2023

Accelerating Climate Action with AI

November 2023
By Amrane Dannouni, Stefan A. Deutscher, Ghita Dazza, Adam Elmán, Antonia Gavel, Marsden Hanna, Andrew Hyland, Amjad Khanji, Hamid Maher, David Patterson, Edmond Rhys Jones, Juliet Rothenberg, Hamza Toer, Maud Texeira, and Ali Zlat



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Discursive alignment between Big AI & governments

WIRED SECURITY POLITICS THE BIG STORY BUSINESS SCIENCE CULTURE REVIEWS

All the President's Tech CEOs

At a White House dinner Thursday night, America's tech executives put on an uncanny display of fealty to Donald Trump.



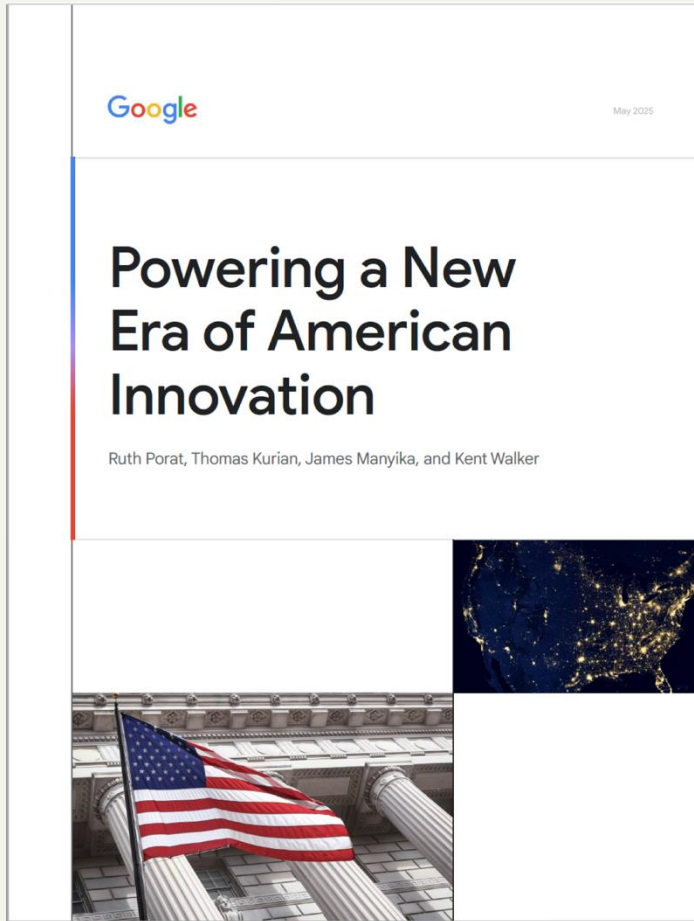
US AI action plan



“We need to build and maintain vast AI infrastructure and the energy to power it. To do that, we will continue to **reject radical climate dogma and bureaucratic red tape**, as the Administration has done since Inauguration Day. Simply put, we need to “Build, Baby, Build!” (1)

The U.S. **electric grid** is one of the largest and most complex machines on Earth. It, too, will need to be **upgraded** to support data centers and other energy-intensive industries of the future. (15)

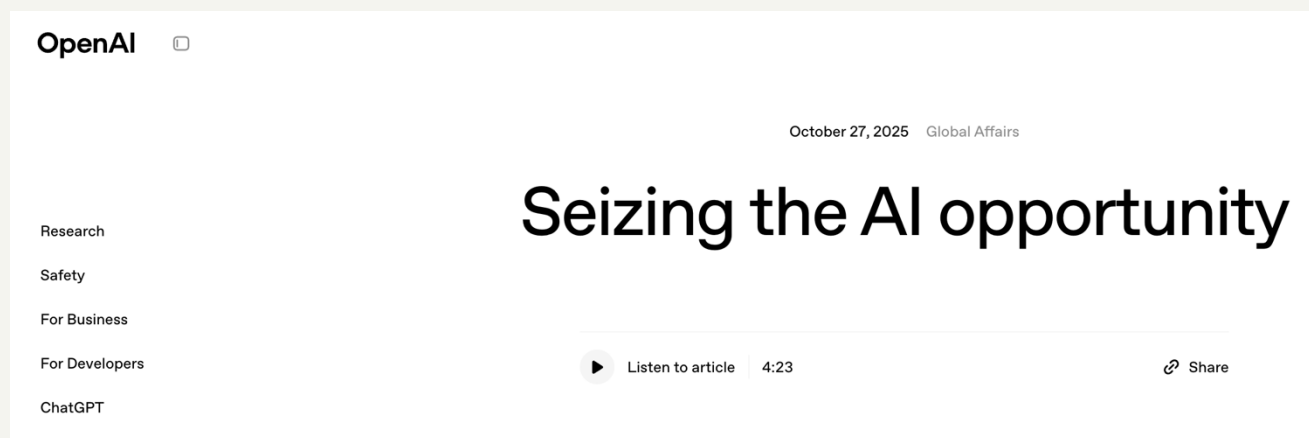
Google



“Leading in AI and digital transformation, however, requires a **significant increase in U.S. electricity supply**” (5)

“Looking ahead, ushering in an era of **abundant growth** requires accelerating investment in many sources of **energy**, including geothermal, advanced nuclear, and natural gas generation with carbon capture and sequestration..” (7)

OpenAI

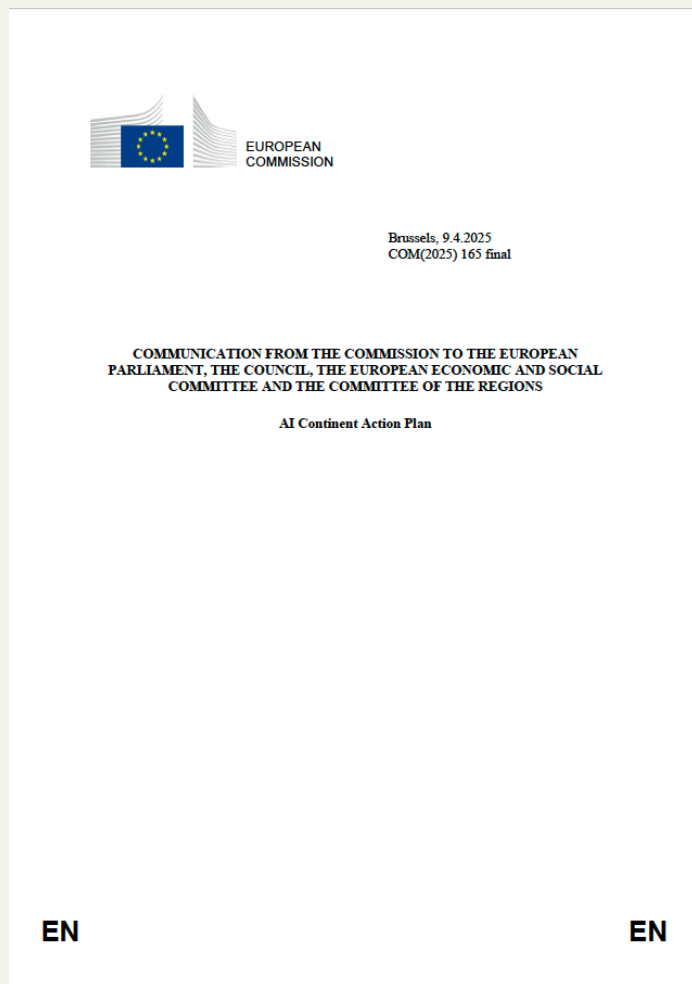


The screenshot shows the OpenAI website interface. At the top left is the 'OpenAI' logo with a square icon. Below it is a navigation menu with links for 'Research', 'Safety', 'For Business', 'For Developers', and 'ChatGPT'. The main content area features the article title 'Seizing the AI opportunity' in a large, bold font. Above the title, the date 'October 27, 2025' and the category 'Global Affairs' are displayed. Below the title, there are two interactive elements: a play button icon followed by the text 'Listen to article 4:23' and a share icon followed by the text 'Share'.

“OpenAI was **pleased to see the Trump Administration’s AI Action Plan recognize how critical AI is** to America’s national interests, and how maintaining the country’s lead in AI depends on harnessing our national resources: chips, data, talent and energy.” (2)

“But limits on how much electricity the US can generate to power AI development **threaten both our ability to seize this once-in-a-century opportunity**, and our advantage on **the most consequential technology since electricity itself.**” (1)

EU AI Action Plan



“The global **race** for leadership in AI is far from over” (1)

“Europe must act with ambition, speed and foresight to shape the future of AI in a way that enhances our competitiveness, **safeguards and advances our democratic values** and protects our cultural diversity” (1)

“establishing **resource-efficient** Gigafactories” (2)

“private-sector investment in cloud capacity and **sustainable data centres** must be facilitated and scaled up” (2)

“Adding new data centres to the grid presents important **challenges**, notably in terms of potential impacts on consumption, other energy consumers, networks and decarbonisation” (10)

OpenAI & Google

“to help Europe **seize the promise** of artificial intelligence to drive sustainable economic growth across the region and ensure that AI is developed and deployed **by Europe, in Europe, for Europe.**” (OpenAI)

“If Europe doesn’t provide **the attractive environment** for this investment [...] **the funds will flow to projects elsewhere**, potentially backed by regimes that do not share Europe’s values.” (Open AI)

“AI can revolutionize the **EU’s approach to climate change** mitigation and adaptation.” (Google)



Big AI as climate actors

Shaping the energy market

Carbon-free energy

Transitioning to carbon-free energy sources is one of the most effective ways to lower **Scope 2 emissions**. As part of this work, we're investing billions of dollars in nuclear, battery storage and **renewable energy** projects around the world that can help power our operations and strengthen everyone's energy future.



Politico, November 2024

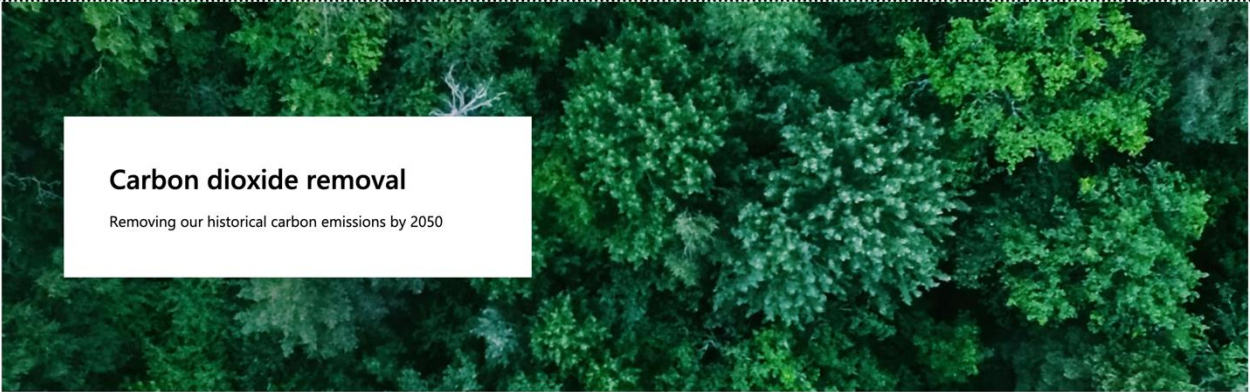
NEWS > TECHNOLOGY

Big Tech's AI dream turns into Ireland's energy nightmare

Energy-hungry artificial intelligence is stressing Ireland's power grids, jeopardizing the country's position as Europe's tech hub.

Carbon offsetting

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Carbon dioxide removal

Removing our historical carbon emissions by 2050

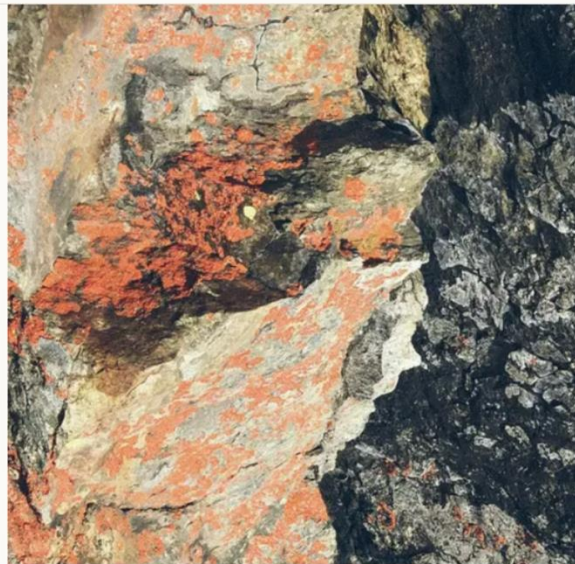
Our commitment

We've committed to be carbon negative by 2030. This means reducing our greenhouse gas (GHG) emissions by more than half, removing the rest, and then removing the equivalent of our historical emissions by 2050.

[Read our public commitment >](#) [View our progress >](#)

An advance market commitment to accelerate carbon removal

Frontier is an advance market commitment to buy an initial \$1B+ of permanent carbon removal between 2022 and 2030. It was founded by Stripe, Alphabet, Shopify, Meta, McKinsey and tens of thousands of businesses using Stripe Climate.



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Founding members



Lobbying for standards

The image shows the top section of a Financial Times article. At the top, there is a navigation bar with a menu icon, a search icon, the 'FINANCIAL TIMES' logo, a 'Subscribe' button, and a 'Sign In' link. Below this is a secondary navigation bar with links for 'HOME', 'WORLD', 'US', 'COMPANIES', 'TECH', 'MARKETS', 'CLIMATE', 'OPINION', 'LEX', 'WORK & CAREERS', 'LIFE & ARTS', and 'HTSI'. The main visual is a graphic featuring a map of the United States with several logos overlaid: Google (G), Amazon (a), Microsoft (Windows logo), and an infinity symbol. In the background, there are images of industrial smokestacks emitting dark smoke and several wind turbines. At the bottom of the graphic, there is a dark banner with the text 'Climate graphic of the week Climate change' and a '+ Add to myFT' button. Below the banner, the article title 'Big Tech's bid to rewrite the rules on net zero' is displayed in large white font, followed by a sub-headline 'Critics say a proposed change could allow large energy users to hide their true emissions' in a smaller white font.

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Climate graphic of the week Climate change + Add to myFT

Big Tech's bid to rewrite the rules on net zero

Critics say a proposed change could allow large energy users to hide their true emissions

What is Big AI doing?

Creating discursive alignment

Big Tech discourse offers techno-optimist and ecomodernist visions on an AI “race” centering innovation and economic growth. This vision aligns with the US governmental AI plans, but also, despite more reservations, with the EU’s plans.

Shaping climate markets

Big AI pushes certain “green” solutions: AI efficiency gains, carbon removal tech, datafication of energy grids, increasing their economic and infrastructural power.

Ignoring environmental concerns & undermining regulation

Their solutions often do not directly decrease carbon emissions and the industry remains highly extractive and pollutive. They lobby for deregulation and promise radical improvement in an undefined future.

What should the EU do?

Develop concrete plans for a fair and green transition

Maintain and implement a clear vision of a fairer, greener future, both within and beyond Europe, across policy and discourse. Oppose Big Tech's green extractivist logics.

Regulate tech and climate markets

Do not follow deregulatory rhetorics, but further regulate Big Tech across sectors and critically assess the potential of climate tech solutions in green transition plans.

Address environmental concerns

Set high standards and clear conditions for tech development in line with ambitious climate goals. Hold companies accountable for their emissions and demand transparency.

PERSPECTIVE

Bigger And Faster Or Better And Greener? The EU Needs To Define Its Priorities For AI

RIANNE RIEMENS, JOSÉ VAN DIJCK / AUG 21, 2025



Henna Virkkunen, Executive Vice-President for Tech Sovereignty, Security and Democracy of the European Commission. [Source](#)

Big AI's climate futures

*From discursive alignment
to green conditions*

References

- Brodie, P. (2024). “Smarter, greener extractivism: digital infrastructures and the harnessing of new resources.” *Information, Communication & Society*. DOI: 10.1080/1369118X.2024.2341013.
- Riemens, R. (2025). “Greenwashing Silicon Valley: The legitimization of green platform capitalism through tech-on-climate discourse.” *Big Data & Society*. DOI: 10.1177/20539517251389853.
- Riemens, R. & Van Dijck, J. (2025). “Bigger And Faster Or Better And Greener? The EU Needs To Define Its Priorities For AI.” *Tech Policy Press*. <https://www.techpolicy.press/bigger-and-faster-or-better-and-greener-the-eu-needs-to-define-its-priorities-for-ai/>
- Rikap, C. & Weko, S. (2025). “A green transition orchestrated from Big Tech clouds?” *Globalizations*, DOI: 10.1080/14747731.2025.2548716.
- Steinhoff, J. & Brodie, P. (2025). “Green simulation, infrastructure, and the planned energy futures of big tech.” *Globalizations*, DOI: 10.1080/14747731.2025.2543696.
- Van der Vlist, F., Helmond, A., & Ferrari, F. (2024). “Big AI: Cloud infrastructure dependence and the industrialisation of artificial intelligence.” *Big Data & Society*. DOI: 10.1177/20539517241232630.
- Weko, S. (2024). “New Sites of Accumulation? Why Intangible Assets Matter for Energy Transitions.” *Review of Political Economy*, DOI: 10.1080/09538259.2024.2391304.