

AI Dominates Climate Debate as Environmental Concerns Grow at New York Climate Week

Artificial intelligence has emerged as one of the dominant topics at New York Climate Week this year, as policymakers, investors, scientists and climate advocates debate whether the rapidly expanding technology can help address the climate crisis or deepen it.

The discussion comes as world leaders gather in Manhattan for the 81st United Nations General Assembly, with climate change and the environmental consequences of AI increasingly overlapping in policy and investment conversations.

UN Secretary-General António Guterres highlighted the connection between AI and climate change in a speech at the opening of the assembly.

“The climate crisis fuels instability and displacement,” Guterres said, warning that artificial intelligence “could help solve all these challenges, or it could make them worse.”

The debate has gained urgency as global efforts to limit warming to 1.5 degrees Celsius above pre-industrial levels face growing challenges. A recent United Nations Environment Programme report warned that the world is approaching a point where keeping warming below the threshold could become increasingly difficult.

The report also underscored the need for rapid and substantial reductions in greenhouse-gas emissions, alongside carbon-removal technologies capable of removing some of the carbon dioxide already accumulated in the atmosphere.

Against this backdrop, the rapid expansion of AI-powered data

centers is creating both opportunities and new environmental pressures.

AI requires enormous amounts of electricity, prompting technology companies to seek additional power supplies and encouraging investment in energy infrastructure. Startups in nuclear, geothermal, wind and solar energy have benefited from deals with major technology companies, including Google and Meta, seeking electricity to support expanding data-center operations.

Global climate-tech venture capital investment reached about \$26 billion in the first half of 2026, according to data from finance tracker Currence, representing a 55% increase from the same period last year. However, much of the investment has been directed toward technologies and services connected to data centers.

Some climate sectors are receiving considerably less attention. Carbon management and low-carbon fuels, both considered important tools for reducing emissions, have experienced sharp declines in venture investment this year, according to analysis cited by Semafor.

At the same time, the expansion of data centers is contributing to rising emissions from some of the world's largest technology companies. Microsoft, Google and Meta had previously announced ambitious emissions-reduction targets, but their emissions have increased in recent years, with data-center growth linked to the expansion of AI among the contributing factors.

Some researchers and energy experts remain optimistic about AI's potential climate benefits.

Evelyn Wang, vice president of energy and climate at the Massachusetts Institute of Technology, has pointed to AI's potential to accelerate scientific research, including the search for new catalysts and other technologies that could

support the clean-energy transition.

Wang has also said that data centers may eventually become less damaging to the climate and water systems, although the transition could take about a decade.

In the meantime, however, rising electricity demand is prompting utilities and developers to bring additional natural-gas power generation online. Critics warn that once built, such plants can operate for decades, potentially locking in additional greenhouse-gas emissions.

The environmental footprint of AI is also generating growing opposition in communities located near data centers and associated power infrastructure, where residents have raised concerns about pollution, noise and pressure on local resources.

At Climate Week, the debate has therefore shifted beyond whether AI can deliver technological breakthroughs. Increasingly, climate advocates are questioning how its benefits will be distributed and whether they can justify the environmental costs of its rapid expansion.

UN climate chief Simon Stiell urged technology companies to demonstrate that the benefits of AI extend beyond a small group of beneficiaries.

“AI leaders are now on thin ice when it comes to license to operate and sinking deep underwater when it comes to public support,” Stiell said during a speech this week. He called on technology leaders to show why the benefits of AI outweigh its rapidly increasing costs.

The debate at New York Climate Week reflects a broader dilemma facing the global climate community: AI could accelerate innovation needed to tackle climate change, but its growing energy demand and associated emissions could also make the transition more difficult.