The Climate Summit Embraces A.I., With Reservations

Artificial intelligence has been a breakout star in the opening days of COP28, the United Nations climate summit in Dubai, United Arab Emirates. Entrepreneurs and researchers have dazzled attendees with predictions that the fast-improving technology could accelerate the world's efforts to combat climate change and adapt to rising temperatures.

5 But they have also voiced worries about A.I.'s potential to devour energy, and harm humans and the planet. (…)

The hope for A.I. breakthroughs in the fight against rising global temperatures flows from the technology's ability to process vast quantities of information. That allows it to produce insights and efficiencies that far exceed what computers and data scientists have been able to do, with a
10 wide range of applications for climate.

The United Nations said on the summit's opening day that it was partnering with Microsoft on an A.I.-powered tool to track whether countries are following through on their pledges to reduce fossil fuel emissions, helping to solve what has been one of the thorniest issues in international climate diplomacy. (…)

15 Officials from Google and Boston Consulting Group predicted that A.I. could help mitigate as much as one-tenth of all greenhouse gas emissions by 2030. (…)

In an interview at the conference, David Sandalow , a researcher, said (…):

"When Thomas Edison invented the lightbulb, he physically took different metals to test how they would react to electric charges — it took him months to identify the best options," Mr.
20 Sandalow said. "Today, with A.I. tools, we can test a million different options in a second and impose chemical structural constraints to figure out what's realistic and rapidly accelerate the pace of innovation."

In a panel discussion on Sunday morning, business executives said A.I. was already helping their companies deliver alerts to people at risk of experiencing flooding, send text messages
25 with hyperlocal planting advice to farmers coping with drought and help people exposed to high levels of air pollution decide the safest times to venture outdoors.

They also said concerns over the technology were holding them back from doing more.

"Climate change is a man-made existential threat," Natalie Blyth, the global head of commercial banking sustainability at HSBC, said at the event. "What we don't want is to move
30 from one man-made to another," she said, referring to crises. "So we have to be responsible and ethical, and really cautious, in how we release and understand some of these technologies."

Leaders at the companies developing A.I. technology have already cautioned that it could someday pose a risk of extinction to humanity, on par with nuclear war. Researchers at COP28 have focused on a different risk — that the computing power required to run advanced A.I.
35 could be enormous. That electricity appetite could send emissions soaring and make climate change worse. (…)

Brad Smith, the president of Microsoft, said in an interview that A.I. was creating huge additional demand for energy. To address that, he said Microsoft was working to improve the sustainability of its data centers and help develop more renewable energy. (…)

Jim Tankersley, *The New York Times,* December 3, 2023.