New Google Report Reveals the Hidden Cost of AI

Google wants to get to net zero emissions by 2030, but its AI investment is making its environmental commitment more challenging.

Google released its 2024 environmental report on Tuesday and reported a nearly 50% increase in greenhouse gas emissions within the span of four years. In 2023, the tech giant's emissions totaled 14.3 million tonnes of carbon dioxide equivalent, a 13% increase from 2022 and a 48% increase since 2019.

Energy consumed by data centers and Google's supply chain contributed most to the increase.

"As we further integrate AI into our products, reducing emissions may be challenging due to increasing energy demands from the greater intensity of AI compute," Google wrote.

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The company also expects to produce more emissions as it invests more deeply in the technical infrastructure needed for AI.

Sign outside Google’s campus in Mountain View, California. Photographer: Mike Kai Chen/Bloomberg via Getty Images

AI complicates the net-zero goal Google set three years ago, to balance the emissions it releases with removal until its carbon footprint reaches net zero.

Google acknowledged the challenge more than once in its environmental report, writing that AI’s future environmental impact “is complex and difficult to predict.”

At the same time, Google placed AI’s potential to address climate change front and center in the report, highlighting a 2021 Boston Consulting Group study that claimed that AI can reduce overall emissions by 5% to 10%.

“AI has a critical enabling role to play in accelerating

mitigation, supporting adaptation, and building foundational capabilities for the transition to a low-carbon future," Google wrote.

Google has released multiple AI products to the public, including AI overviews in Search and AI integration with Gmail, Google Docs, and Google Sheets.

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The tech giant isn't alone in feeling the energy downside of AI: Microsoft too, which has a net-zero by 2030 goal, reported in May that emissions jumped 30% from 2020 to 2023.

https://www.entrepreneur.com/business-news/ai-drives-googles-greenhouse-emissions-up-by-48-since-2019/476620