# Google Reports 48% Rise in Carbon Emissions, Cites AI-driven Data Centre Energy Demands



Google, the Mountain View-based technology company, reported a significant rise in its carbon emissions in its 2024 Environmental Report. Over the past five years, the firm's greenhouse gas emissions have increased by 48%, with a 13% rise from the previous year alone. This uptick is attributed to a surge in energy demands from its data centers, primarily driven by the rising utilization of artificial intelligence (AI).

Despite Google's pledge to achieve net-zero emissions across its operations and value chain by 2030, the report highlights challenges due to AI's intensive energy requirements. Data centers' energy consumption surged by 17% in 2023, now constituting 25% of Google’s total emissions. The supply chain accounts for the remaining 75%.

Google emphasizes ongoing efforts to curtail emissions, such as enhancing infrastructure and adopting more energy-efficient technologies like six-generation Tensor Processing Units (TPUs), which are expected to significantly reduce AI model training energy needs. The report mentions that 64% of the company’s current energy consumption comes from carbon-free sources, including geothermal energy. Additionally, contracts have been signed to procure nearly 4 gigawatts of clean energy in locations such as Australia, Belgium, and Texas.

Google also notes improvements in reducing single-use plastic, achieving nearly plastic-free packaging for its Pixel series devices. However, decarbonization remains particularly challenging in regions like Asia-Pacific, where carbon-free energy is less accessible.

With its AI initiatives expanding, Google must address the environmental impact to stay on track with its 2030 net-zero goal. The effectiveness of these measures remains to be seen.