

Why We Need to Stop GenAI: The Environment Needs Us

An Environmentalist's Perspective

Introduction

Hey friends! As an environmentalist who cares deeply about our planet's future, I want to talk today about something that's getting a lot of buzz: Generative AI—often called “GenAI”—and the StopGenAI movement. There's a lot of excitement about what powerful AI can do, but we also need to ask what it's doing to our environment... and weather.

It's not about resisting new technology, but about acknowledging its overlooked drawbacks—especially the environmental impact. For example, in Jammu, we used to experience winter by mid-September, but last year the season only began in mid-December. Climate change is complex, with many contributing factors, but it's clear that the growing energy demands of AI systems—and the carbon emissions from powering them—can also play a part. Of course, I'm not saying it's only because of AI; climate is being affected due to a lot of factors, with GenAI and other advancements in artificial intelligence being just one reason among many.

What's the Problem With GenAI?

GenAI isn't just about chatbots and fancy image generators. It's a massive, energy-hungry system that runs on huge data centers scattered around the world. Training and running these AI models require huge amounts of electricity, pushing our power grids to the limit.

- **Energy Use:** Training one large AI model can use as much energy as a small town does in months! The servers that run GenAI are powered day and night, often using fossil fuels unless renewables are available.
- **Water Consumption:** Data centers need enormous amounts of water for cooling—up to 300,000 gallons a day—rivaling the use of whole neighborhoods. This strains local water supplies and affects nearby ecosystems.

- **Carbon Footprint:** Burning fossil fuels for electricity releases tons of carbon dioxide into the air, causing global warming and climate change—making extreme weather even worse.
- **E-Waste:** The tech that powers GenAI becomes outdated fast. Broken, outdated computers pile up as electronic waste, one of the fastest-growing waste streams worldwide.

A Local Perspective: Jammu’s Changing Winters

For many of us, the reality of climate change feels personal. In Jammu, winters used to arrive by mid-September, but last year they started only around mid-December. This shift can be unsettling, and it’s a reminder that climate change is influenced by a wide mix of factors—industry, transport, energy use, deforestation, as well as the growing energy footprints of AI. I’m not claiming it’s only because of AI, but it’s one among many contributors we need to understand as we see dramatic changes in our local weather.

How Does GenAI Affect Weather and Climate?

AI’s environmental impact is real, and it touches weather and climate in several ways:

- **Climate Change:** More carbon emissions mean global temperatures rise. That leads to wild swings in weather—a heatwave here, a superstorm there, unpredictable rainfall everywhere.
- **Local Weather Patterns:** Massive data centers can heat up their surroundings. Sometimes they are built near marginalized neighborhoods, affecting local temperatures and reducing air quality.
- **Water Shortages:** Redirecting large amounts of water to cool servers can worsen droughts—especially as climate change intensifies water scarcity in some regions.

It’s important to recognize that these impacts come on top of many other causes of climate change, including fossil fuel use, agriculture, land use changes, and natural processes like El Niño. AI and GenAI are part of the bigger picture, not the whole story.

Is There Any Good News?

Absolutely! Some researchers say that if we use GenAI wisely—for example, to help monitor emissions, design renewable energy systems, or forecast extreme weather—it might help us fight climate change and reduce global emissions by billions of tonnes per year.

Right now, however, only about 12% of those running GenAI are measuring its environmental impact. Most big tech companies are still chasing bigger, faster models with little thought for energy and water consumption.

What Can We Do?

Here are some steps that the StopGenAI movement and caring citizens can take:

- **Ask Questions:** Before we celebrate the next AI breakthrough, demand to know its carbon footprint and water use.
- **Support Renewables:** Data centers running on wind or solar are far better for the planet—let’s push big tech to transition.
- **Use Less, Use Better:** Not every website or app needs GenAI. Choose low-impact tools, and encourage software makers to optimise their models.
- **Advocate for Standards:** Support governments and international organisations setting real limits and standards for sustainable AI.
- **Demand Environmental Reporting:** Push for transparency—if a company uses GenAI, they should report its environmental effects.

In Simple Terms

GenAI is like a super-powered computer that consumes vast amounts of energy and cools itself in enormous “swimming pools” of water—while leaving behind a mountain of e-waste. If we don’t control its appetite, it could set back our fight against climate change and make weather patterns even more extreme. But if we guide its use wisely, it could help us predict disasters and clean up our environmental mess.

Remember, the climate is shifting due to many reasons. The choices we make with AI and technology simply add to the mix.

Conclusion

We’re at a crossroads. We can let GenAI drive climate and weather chaos, or we can stop, think, and use it to heal the Earth. The choice—and the responsibility—is ours.

Let’s keep speaking up, stay green, and remember: the environment doesn’t have a “restart” button!