

HOW DOES AI AFFECT THE ENVIRONMENT?

AI is more energy-intensive than traditional computing



AI models consume significant energy and generate emissions through hardware production. In many places, this energy still relies on fossil fuels, producing greenhouse gases (UNEP, 2024).

The hardware required to run AI is complex and resource-heavy

Many AI chips rely on rare earth elements, which are often mined in environmentally destructive ways (UNEP, 2024).



Rapid advances in AI are causing hardware to become obsolete faster than traditional servers



AI is projected to drive e-waste to 1.2–5.0 million metric tons by 2030 (IUE, 2024), much of it containing hazardous materials. Without proper recycling, this poses environmental risks (Winsta, 2025; UNEP, 2024).

AI data centres generate significant heat and require constant cooling

Data centres powering AI use roughly 500 ml of water per 10–50 prompts (arXiv, 2026) and in 2023, Google's data centres withdrew 29 billion litres of freshwater (Li et al., 2025).



TIPS FOR AI GOOD PRACTICE



UNIVERSITY
of York



Disable AI search features

If you put '-AI' into the search bar when you ask a question, it won't use generative AI.

Use direct instructions

There's no need to say please, thank you, can you. Instead, say: 'Do X'.



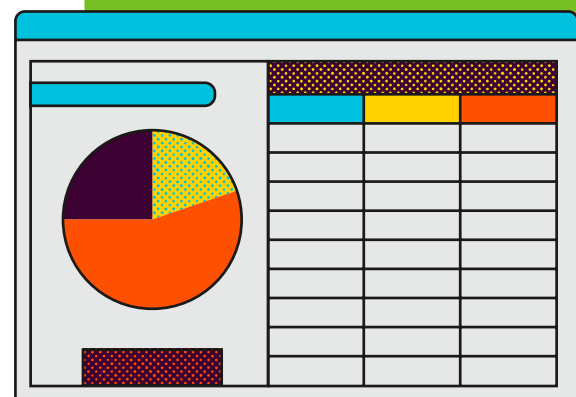
Trim down documents

Only upload relevant pages or sections rather than the entire document



Force concise responses

Restrict your output with word limits and ask for tables or bulleted lists.



Make prompts specific & succinct

For example, ask the AI to list three examples each under 20 words, and reduce the number of separate prompts.



Avoid wasteful AI use

Use standard internet searches for trivial queries and avoid image and video generation where possible.



greenimpact

Source: Law Society of Scotland
Created by: Centre for Health Economics, University of York

Learn more about how to reduce the environmental impact of your AI use by scanning the QR code.

