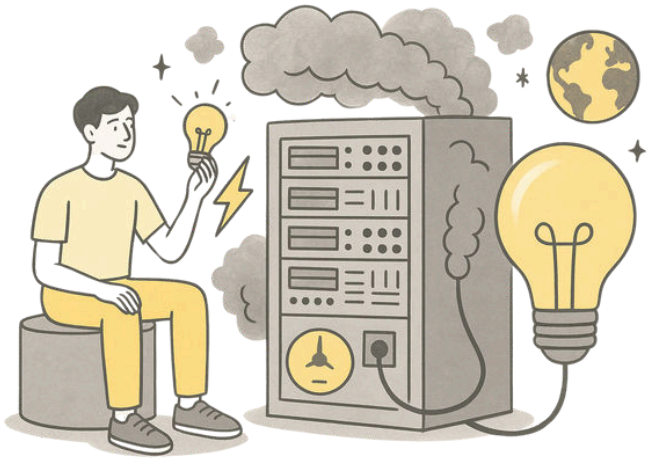
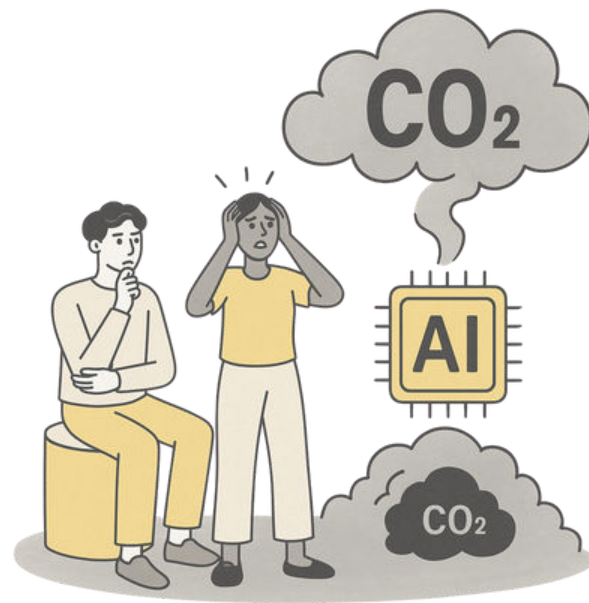


Massive Energy Consumption



Training large AI models demands enormous amounts of electricity, often from fossil fuels, leading to high carbon emissions.

Carbon Footprint of AI Models



A single NLP model can emit over 660,000 pounds of CO₂, the equivalent of five gas-powered cars over their lifetime.

Mineral Extraction



AI systems depend on rare earth elements and lithium, extracted through environmentally destructive mining operations in places like Nevada, Congo, and Bolivia.

E-waste Pollution



Discarded devices and servers from AI infrastructure contribute to toxic e-waste, often dumped in regions with minimal regulation, such as Ghana and Pakistan.



The Hidden Ecological Cost of AI

Our Planet Pays the Price

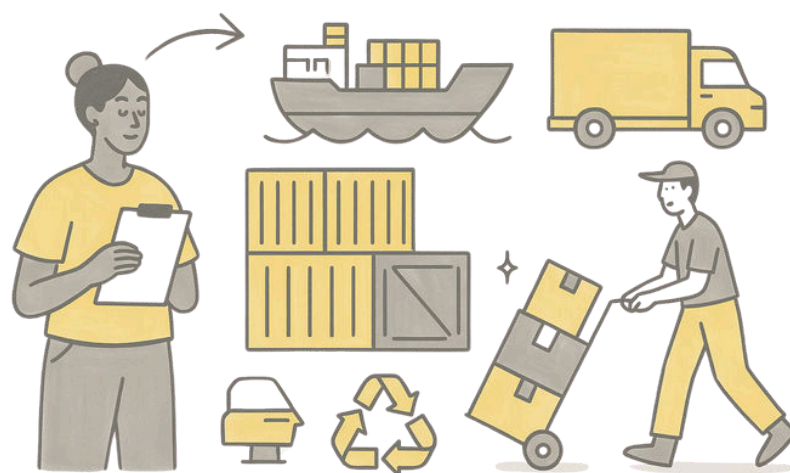
www.educatorstechnology.com

Data Centers and Pollution



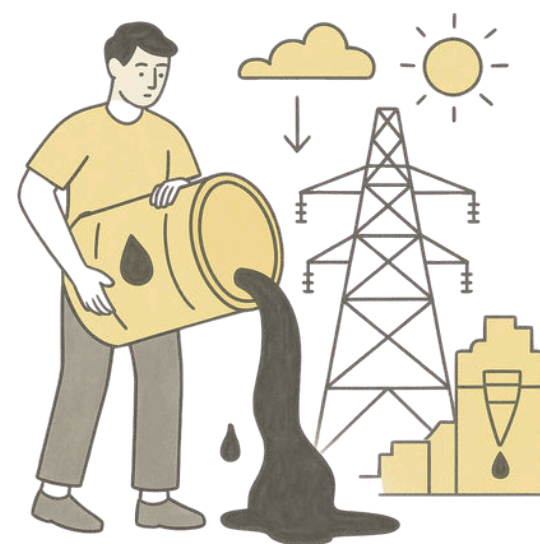
AI relies on energy-hungry data centers, which are major consumers of electricity and contribute to air and water pollution.

Shipping and Supply Chains



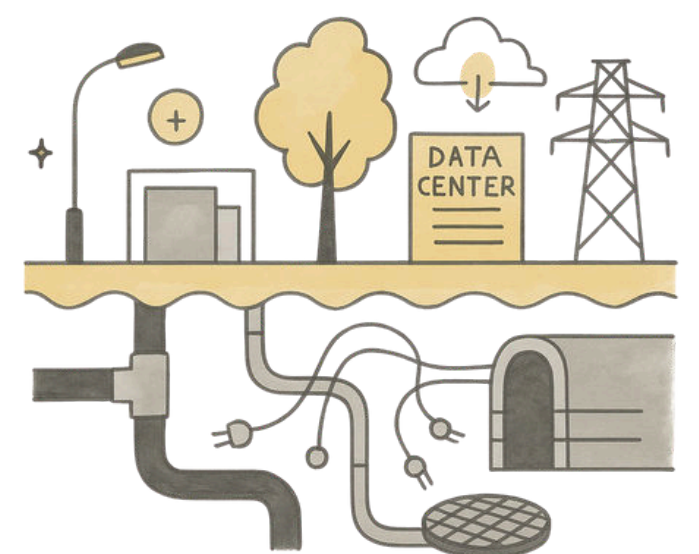
The global movement of AI hardware relies on container shipping, which produces more annual CO₂ emissions than many countries.

Depletion of Nonrenewable Resources



AI hardware is built from materials that took billions of years to form and cannot be replenished and this accelerates resource depletion.

Hidden Infrastructure



Despite being marketed as “virtual,” AI systems are grounded in vast physical infrastructures with real environmental costs.

Based on Insights from

Crawford, K. (2021). *Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence*. Yale University Press.



Prepared by Med Kharbach, PhD
www.educatorstechnology.com

