

EcoLLM

Measuring the hidden carbon cost of AI

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The Problem

AI models consume vast amounts of energy. Every LLM query has an environmental footprint—but we rarely see it.

Massive Energy Use

Training and inference require significant computational resources

Hidden Impact

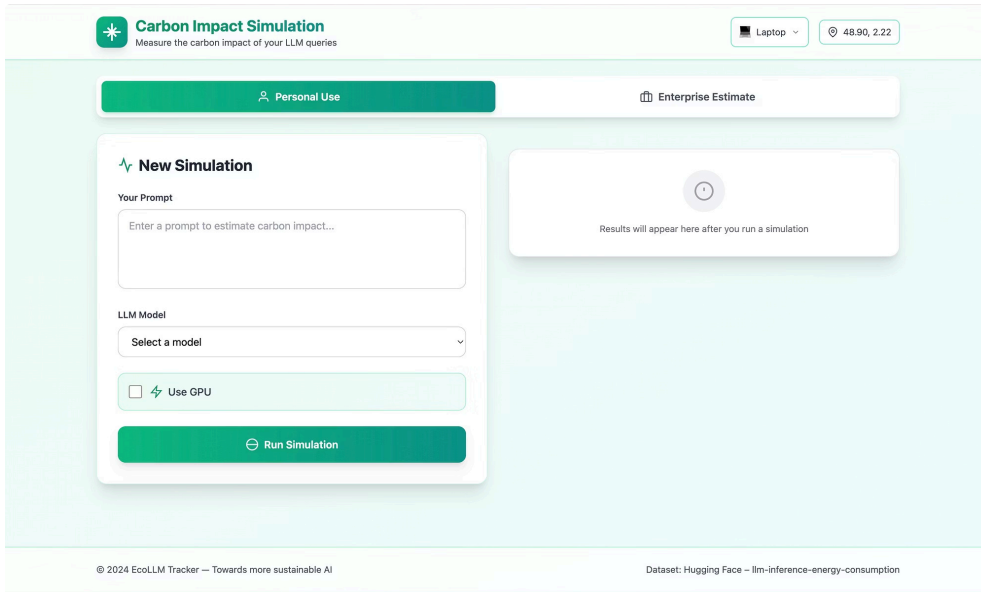
Users remain unaware of carbon emissions per request

No Transparency

Lack of standardized measurement across platforms

EcoLLM Solution

Real-time carbon impact estimation for every AI request



The screenshot shows the 'Carbon Impact Simulation' web application. At the top, there's a header with the app's name and a tagline 'Measure the carbon impact of your LLM queries'. On the right, it displays 'Laptop' and a carbon footprint of '48.90, 2.22'. Below the header, there are two tabs: 'Personal Use' (selected) and 'Enterprise Estimate'. The main content area is divided into two sections. On the left, under 'New Simulation', there's a 'Your Prompt' input field with placeholder text 'Enter a prompt to estimate carbon impact...'. Below this is an 'LLM Model' dropdown menu with 'Select a model' and a 'Use GPU' checkbox. At the bottom of this section is a green 'Run Simulation' button. On the right, there's a large white box with a clock icon and the text 'Results will appear here after you run a simulation'. The footer contains copyright information '© 2024 EcoLLM Tracker — Towards more sustainable AI' and the dataset source 'Dataset: Hugging Face - llm-inference-energy-consumption'.

Web App

capable of estimating the carbon footprint (CO₂) of a request sent to an LLM.

Track carbon emissions in real-time. See energy consumption per query, understand your AI footprint.

Demo



Impact & Vision

Empower users. Drive change. Make AI sustainable.

1

Awareness

Transparent carbon metrics

2

Accountability

Track environmental footprint

3

Action

Optimize queries, reduce emissions