AI X SUSTAINABILITY

AD NET ZERO RESOURCE GUIDE

Ad Net Zero 'We Need to Talk about Sustainability x AI' webinar series

Ad Net Zero hosted three webinars exploring the opportunities and challenges of AI as it becomes ubiquitous, particularly in the advertising industry. Experts from APR, Google, HAVAS, ITV, Scope 3, Murphy Cobb, Public Good, Reckitt, and trade associations the 4A's, Advertising Association, and ISBA shared their perspective over three sessions. Key topics included:

- what people need to understand about AI (AI vs. Gen AI / LLMs),
- what we know and don't know about AI's emissions and natural resource use,
- industry uses, examples of AI powering sustainability through efficiency or innovation.

AI Foundation & Operational

AI in Creative & Production

AI Future & Policy

Check out the <u>full writeup</u> with summaries and additional resources.

Ad Net Zero AI x Sustainability Exploratory Q1 2025 Series Summary

18 MARCH 2025

In Q1 2025, Ad Net Zero held a global educational exploratory series on AI and Sustainability. This three-part series covered a wide range of topics, from foundational information and misconceptions about AI, energy use and natural resource use, specific applications in production and creative, to the future of AI policy and regulation across the globe.

Experts from trade organisations 4As, Ad Association, ISBA, along with Google, Havas, Scope3, Spark Foundry, Public Good, APR, Murphy Cobb, ITV all contributed to the series.

Read below for a summary of the takeaways, **trailers** (full videos are accessible by supporters only), and valuable resources that speakers and attendees shared.

"We can use generative AI to **support growth** in our businesses **while recognising the carbon cost**...**before** discussing the lack of consensus on AI emissions measurement and the **actionable steps one can take now** to reduce carbon intensity."

- **AYA SAED**, DIRECTOR OF AI POLICY & STRATEGY, **SCOPE3**

"The real value comes when AI tools are used as enablers, not as replacements, enhancing human creativity and strategic decision making."

- STEFFEN GENTIS, **MURPHY COBB & RECKITT**

"Try to understand where this sits in terms of your **overall impact.** ...How you can use these tools, **not only** in making sure the tools are as environmentally efficient as possible, but... to reduce the **overall impact** of your organisation".

- **ADAM ELMAN**, EMEA DIRECTOR OF SUSTAINABILITY, **GOOGLE**

External Resources
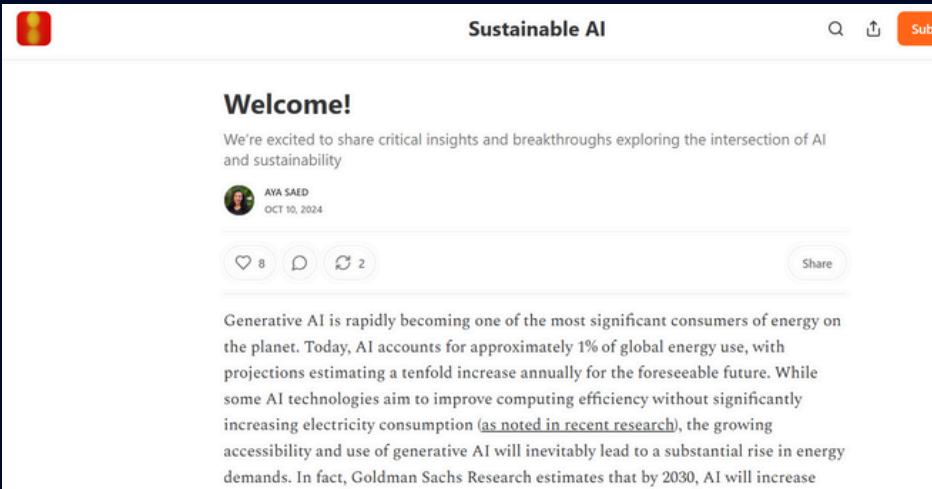
Advertising industry specific resources include:

<u>Page 32, AI Taskforce's Report (2024)</u>

<u>ISBA & the IPA's 'AI Principles' (2023)</u>
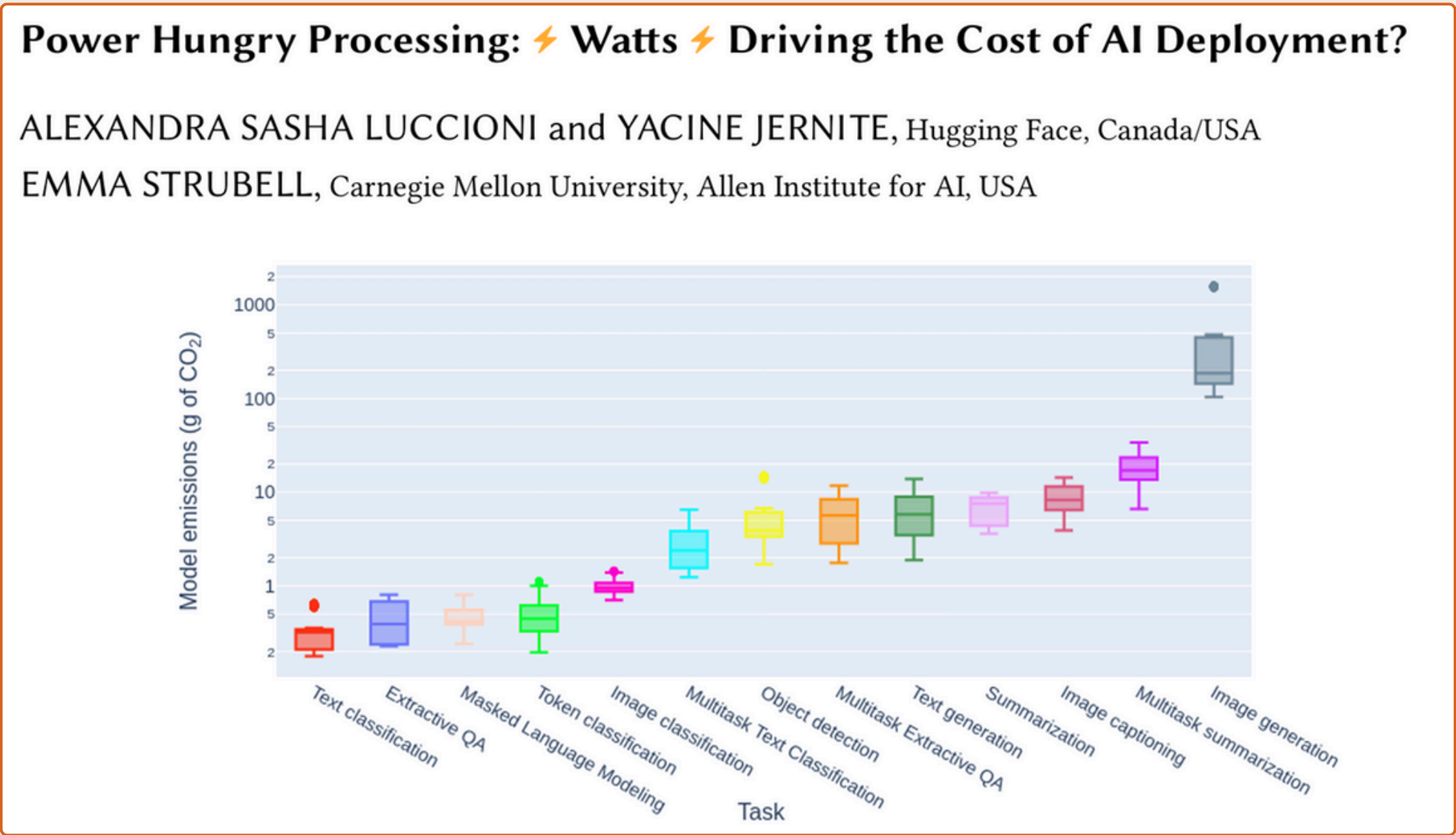

<u>Scope3 Sustainable AI Substack</u>

Check out deeper dive resources on following page...

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Learn more to help you / your organisation develop mindful use principles::

Power Hungry Processing: ⚡ Watts ⚡ Driving the Cost of AI Deployment?

ALEXANDRA SASHA LUCCIONI and YACINE JERNITE, Hugging Face, Canada/USA

EMMA STRUBELL, Carnegie Mellon University, Allen Institute for AI, USA

Quantified Emissions paper | Hugging Face

Be an **informed consumer.** Understand what you're buying and how things differ, so you know what questions to ask.

Dig in on the things you do a lot, not the things you don't do very much... that's where you'll get maximum benefit."
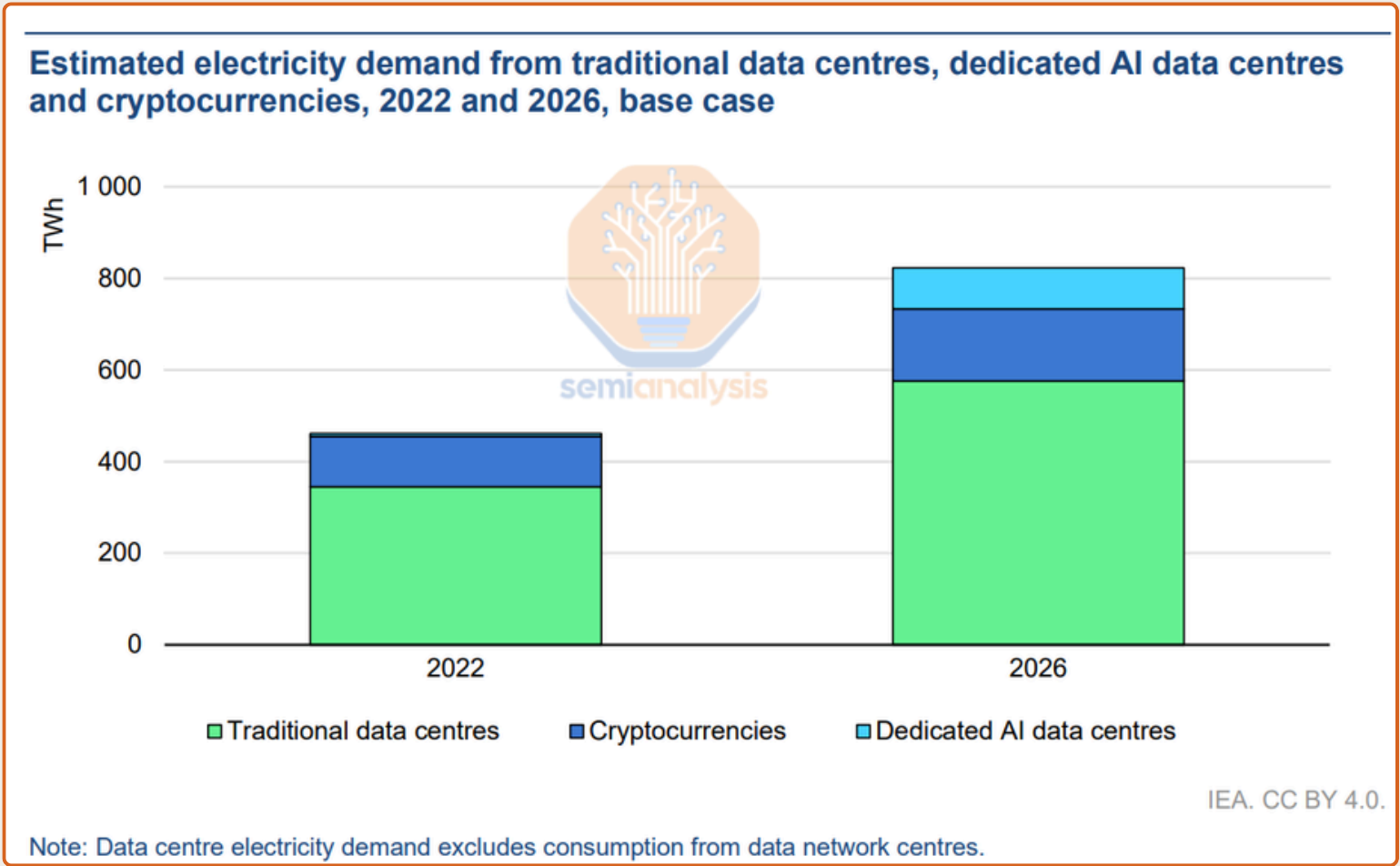
- **DAN RATNER**, CO-FOUNDER AND CEO, **PUBLIC GOOD**

"Keep asking for that [emissions] data from [your service provider]..

Where you have control, think about the optimisation, how you can **run those models more efficiently**."

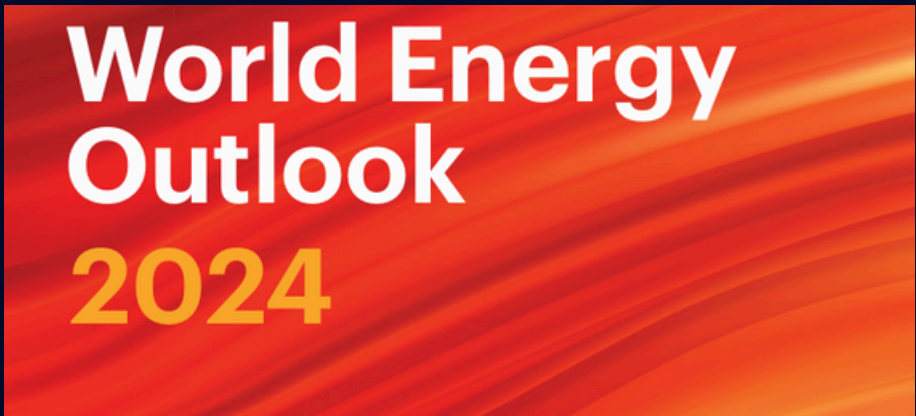- **TIM DAVIS,** PRINCIPAL ARCHITECT, ENTERPRISE ARCHITECTURE, **ITV**

Estimated electricity demand from traditional data centres, dedicated AI data centres and cryptocurrencies, 2022 and 2026, base case

Note: Data centre electricity demand excludes consumption from data network centres.

Electricity 2024 Report | IEA

IEA's Detailed 2024 Energy Analysis

World Energy Outlook 2024

TBI's Policy Recommendations

CLIMATE & ENERGY
Greening AI: A Policy Agenda for the Artificial Intelligence and Energy Revolutions

The Sensible AI Manifesto

THE SENSIBLE AI MANIFESTO

AI for energy optimisation and innovation

Nature, 2025

scientific reports

OPEN **The carbon emissions of writing and illustrating are lower for AI than for humans**

Bill Tomlinson[1,2,✉], Rebecca W. Black[1], Donald J. Patterson[1,3] & Andrew W. Torrance[4,5]

As AI systems proliferate, their greenhouse gas emissions are an increasingly important concern for human societies. In this article, we present a comparative analysis of the carbon emissions associated with AI systems (ChatGPT, BLOOM, DALL-E2, Midjourney) and human individuals performing equivalent writing and illustrating tasks. Our findings reveal that AI systems emit between 130 and 1500 times less CO2e per page of text generated compared to human writers, while AI illustration systems emit between 310 and 2900 times less CO2e per image than their human counterparts. Emissions analyses do not account for social impacts such as professional displacement, legality, and rebound effects. In addition, AI is not a substitute for all human tasks. Nevertheless, at present, the use of AI holds the potential to carry out several major activities at much lower emission levels than can humans.

WEF & BCG, 2025

In collaboration with Boston Consulting Group
WORLD ECONOMIC FORUM
Climate Adaptation: Unlocking Value Chains with the Power of Technology
WHITE PAPER
JANUARY 2025

AI Datacenter Energy Dilemma

AI for energy optimisation and innovation

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Potential energy savings by sector in the Widespread Adoption Case, 2035