

# The climate cost of AI



What do we know, what do newsrooms do, how to report on it?

Pablo Jimenez Arandia & Sebastian Mondial  
Climate Arena 2024, Bologna

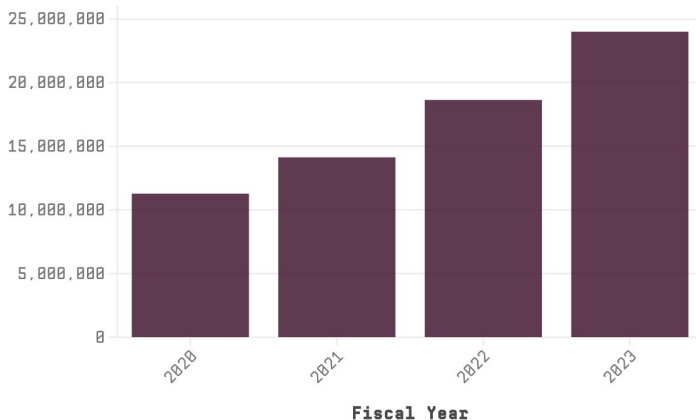
The *cloud* behind AI boom is physical...



# ... and needs a lot of electricity and water

## Microsoft's Energy Consumption Recently Increased

Megawatt Hours of Energy

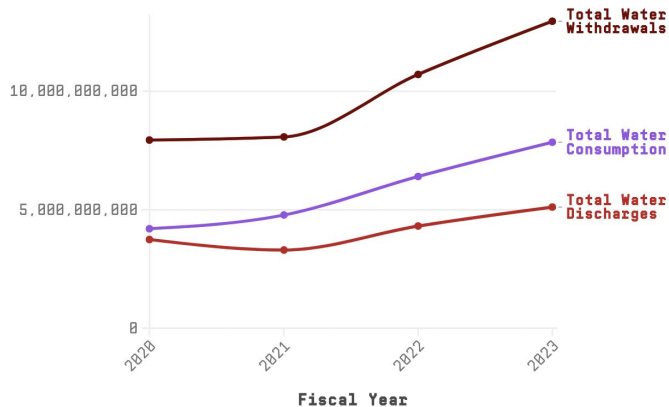


Source: [Microsoft's 2024 Environmental Sustainability Report](#)

WIRED

## Microsoft's Water Impact Continues to Grow

Liters of Water



Source: [Microsoft's 2024 Environmental Sustainability Report](#)

WIRED

## AI's Energy Demands Are Out of Control. Welcome to the Internet's Hyper-Consumption Era

Generative artificial intelligence tools, now part of the everyday user experience online, are causing stress on local power grids and mass water evaporation.

This is a BIG STORY - and **challenges** are so

- Opacity from big tech companies is massive
- Public authorities are lagging behind: no real watchdog
- *Numbers + numbers = numbers.* We need to find the human angle!

## How to overcome them?

- ★ Challenge the big industry narrative
- ★ Make use of transparency mechanisms; FOI requests + regulations
- ★ Shoe-leather reporting: go on the ground, see and ask

# Stories already published

GRANDES TECNOLÓGICAS >

## **E De la Operación Tulipán a la Operación Zarza: así trasladó Meta su nuevo hipercentro de datos a la España vaciada**

La compañía estadounidense está a punto de construir una enorme infraestructura en Talavera de la Reina, después de que un centro parecido se frenase en Países Bajos por la férrea oposición de vecinos y autoridades



Un vecino pasea por los terrenos donde Meta proyecta construir su nuevo centro de datos en el municipio de Talavera de la Reina, con la localidad de Gamonal al fondo. **PABLO JIMÉNEZ ARANDIA**

Credit: ©Pablo Jiménez A

ENVIRONMENT

23 APRIL 2024 - 9 min. read

### Dry Land for Thirsty Data

Pablo Jiménez Arandia

The AI boom is driving a need for huge data centres that consume vast volumes of water and energy. In the face of growing resistance, big tech companies are looking for new regions to build them in. Can a country like Spain, in the midst of a climate emergency, take this gamble? Meta and other internet giants think so.

TRANSLATIONS

EN

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# TAKEAWAYS

- Watchdog journalism: big AI industry needs to be oversight
- This is a global story, like the main actors involved
- Push for more transparency from private & public voices
- What is the best way to tell this story?

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## Context: My label “AI Specialist” at SWR

Couldn't have intentionally achieved to reach where I am now

Position wasn't officially open, it is a bespoke and now evolving task

Result of chance occurrences and maybe ... heating my kitchen with AI

Some uncompromising attitude towards AI, backed by facts

Financial independence means I can walk away the moment it gets weird



## AI at scale - AI Impact in a large public broadcaster / organization

- ★ SWR is one of 11 bodies of public broadcasting in germany
- ★ SWR is the *cloud competence center* in ARD (AI-CC: BR/WDR)
- ★ SWR happens to have agency: went all in, >120 AI use-cases in '23
- ★ How? Ask *the employees* what to use AI for ... and use these ideas!
- ★ I do/did work around “UC-0” - the general use/test of LLMs and AI

# Perspective of AI at *personal scale* and *department scale*

You

everyone in department X

HOW LONG CAN YOU WORK ON MAKING A ROUTINE TASK MORE EFFICIENT BEFORE YOU'RE SPENDING MORE TIME THAN YOU SAVE?  
(ACROSS FIVE YEARS)

	HOW OFTEN YOU DO THE TASK					
	50/DAY	5/DAY	DAILY	WEEKLY	MONTHLY	YEARLY
1 SECOND	1 DAY	2 HOURS	30 MINUTES	4 MINUTES	1 MINUTE	5 SECONDS
5 SECONDS	5 DAYS	12 HOURS	2 HOURS	21 MINUTES	5 MINUTES	25 SECONDS
30 SECONDS	4 WEEKS	3 DAYS	12 HOURS	2 HOURS	30 MINUTES	2 MINUTES
1 MINUTE	8 WEEKS	6 DAYS	1 DAY	4 HOURS	1 HOUR	5 MINUTES
5 MINUTES	9 MONTHS	4 WEEKS	6 DAYS	21 HOURS	5 HOURS	25 MINUTES
30 MINUTES		6 MONTHS	5 WEEKS	5 DAYS	1 DAY	2 HOURS
1 HOUR		10 MONTHS	2 MONTHS	10 DAYS	2 DAYS	5 HOURS
6 HOURS				2 MONTHS	2 WEEKS	1 DAY
1 DAY					8 WEEKS	5 DAYS

HOW MUCH TIME YOU SHAVE OFF



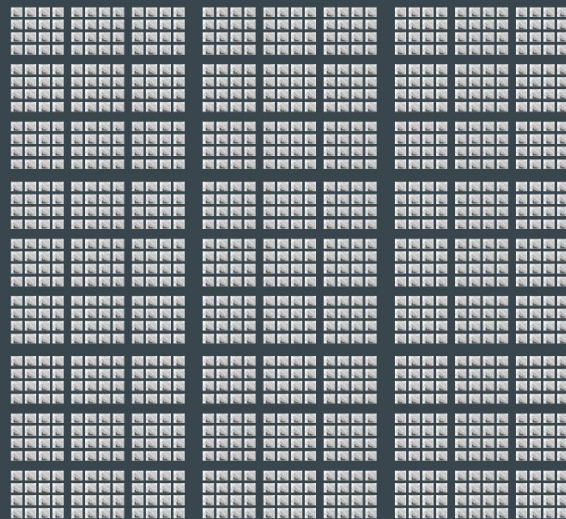
<https://xkcd.com/1205>

# Perspective of AI at *even larger scale*

company



group/industry



## How to keep climate cost as low as possible ... 3 easy questions

- ★ Do we really need AI? It is not **FOMO**, right?
- ★ If we need AI ... can AI **actually do** what we need it for?
- ★ If AI can do what we need it for, does it beat the **Käsebrötchen**\*?

\*humans are more energy efficient as computers - see “Matrix”



## Observations on the BS in AI promotion / sale

- ★ Till 2022 Computer Industry stagnation - example *indicator*: Laptops
- ★ BS/Promise Ratio insanely high - sure, *next version* of AI will fix that /S
- ★ Psychology: AI does not work as hoped? *Its you*, not the AI /S
- ★ Use AI, because otherwise you're antique \*kopfaufdietischkantehau\*

# Observations on AI Sales

- ★ Get our **newest** AI model (but is it necessary?)
- ★ Few own AI, few finance the datacenters (think xxx Mil each)
- ★ Justification of **reversal on nuclear power - ARE WE NUTS?**
- ★ Mentality: **Curveball** - AI will find the fix for Climate Issue in the future!  
**SO ... AI CAN F\*\*\* the environment right now. Right? Right?!?**
- ★ Assume the worst, don't be surprised if it's even ...

## One example on AI SALE Strategies

- ★ You not only **need** AI, but you want **AI AGENTS**
- ★ Whats an AI Agent you ask? Well ... its **MORE AI** ...
- ★ ... It's AI talking to AI until AI figures "it" out.
- ★ How I feel about it while reading the promo: Noah, *get the boat.*



I know, this conference is about environment ...  
... some remarks are needed about AI in general

- ★ .... the social / educational impact (not good)
- ★ ... security / safety implications (not good)
- ★ ... shift in dependence and its structures (not good)
- ★ **Yes**, we have **some** cases of **good** use. Just ... not too many.
- ★ Except u want to automate to remove humans and produce SLOP.



**My LinkedIn Profile**

**vs.**

