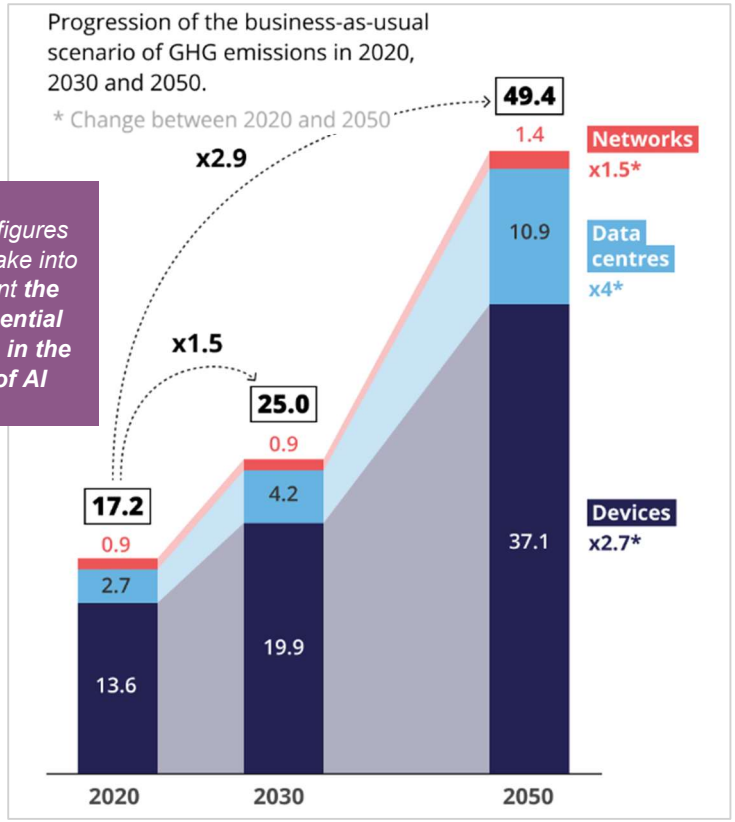
MEASURING THE ENVIRONMENTAL FOOTPRINT OF DIGITAL TECHNOLOGIES

From what we know…

IN FRANCE, IF NO STEPS ARE TAKEN, DIGITAL'S GHG EMISSIONS COULD TRIPLE AND ELECTRICITY CONSUMPTION COULD DOUBLE BY 2050

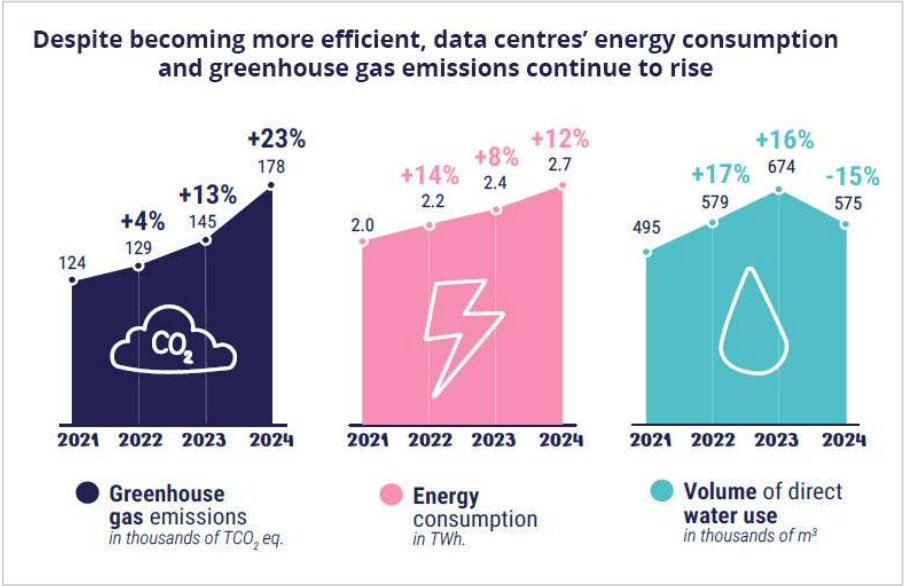
(ADEME-Arcep study, 2023)



*These figures do not take into account **the exponential growth in the use of AI***

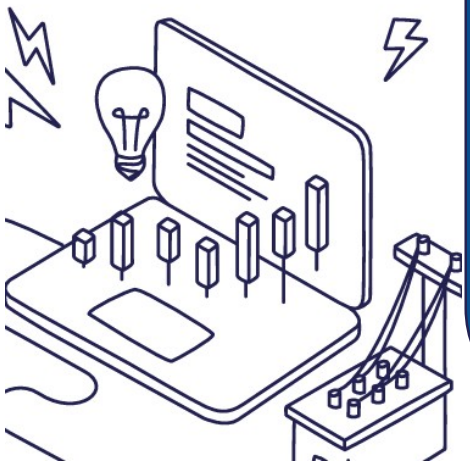
- Digital technologies account for **3 to 4% of total greenhouse gas emissions worldwide**.
- **Their increase is a worldwide trend.**

- Looking beyond carbon footprint, digital technologies are a source of other environmental impacts such as **metals and minerals depletion, water consumption or e-waste generation**, to name but a few.
- These impacts **may be exacerbated by the development of Generative AI**.
- Still, **a lack of transparency:** no environmental information available for 84% of all AI models, for instance.



*Survey « **Achieving Digital Sustainability** »*
2026 edition

… to what needs to be done: more transparency!



Let's look up and engage for an environmentally sustainable digital ecosystem!

WHY

TRANSPARENCY MATTERS

Robust and quantified studies, based on shared methodologies, allow a detailed overview of environmental challenges and the identification of key courses of action to be taken.

Data-driven regulation, through regular collection and publication of indicators and methodologies:

- raises collective awareness, fosters objective discussions, validates or refutes assumptions about digital technologies' environmental impact
- enables policy makers to take evidence-based decisions
- incentivises stakeholders to act responsibly and empowers users

WHERE

RELATED EU POLICIES

Environment & Consumer
Transparency, database (*AI Act, Energy labelling, ESPR*)

Digital & telco
Data collection throughout the value chain (*DNA, CADA*)

HOW

TWO MAIN AREAS OF ACTION

Greater competencies for National Regulatory Authorities (NRAs)

- Include environmental issues in European regulatory objectives

Extending and harmonizing data collection & publication

- Extend the **powers of public authorities (NRAs or others) to collect data on the environmental footprint of digital technologies – across the whole digital value chain –** at European level
- **Establish a public, open-source environmental impact database for digital services and equipment** at EU level
- **Promote methodological work** on measuring the environmental impact of digital **technologies within international forums** (*e.g.*, the International Telecommunication Union and the World Bank)