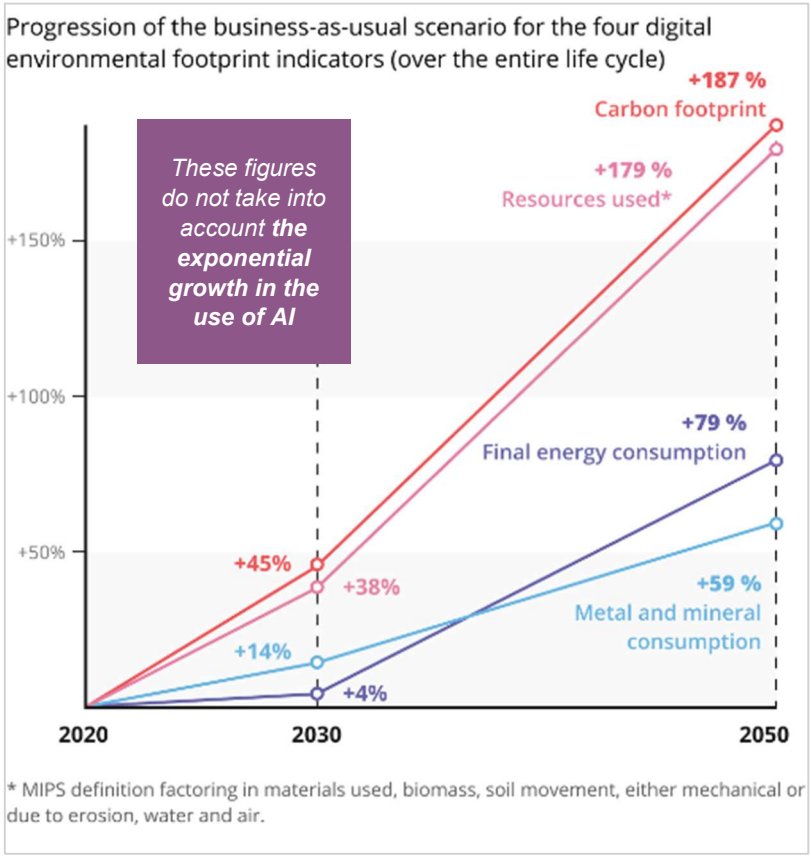
# THE ECODESIGN OF DIGITAL SERVICES

## From evidence…

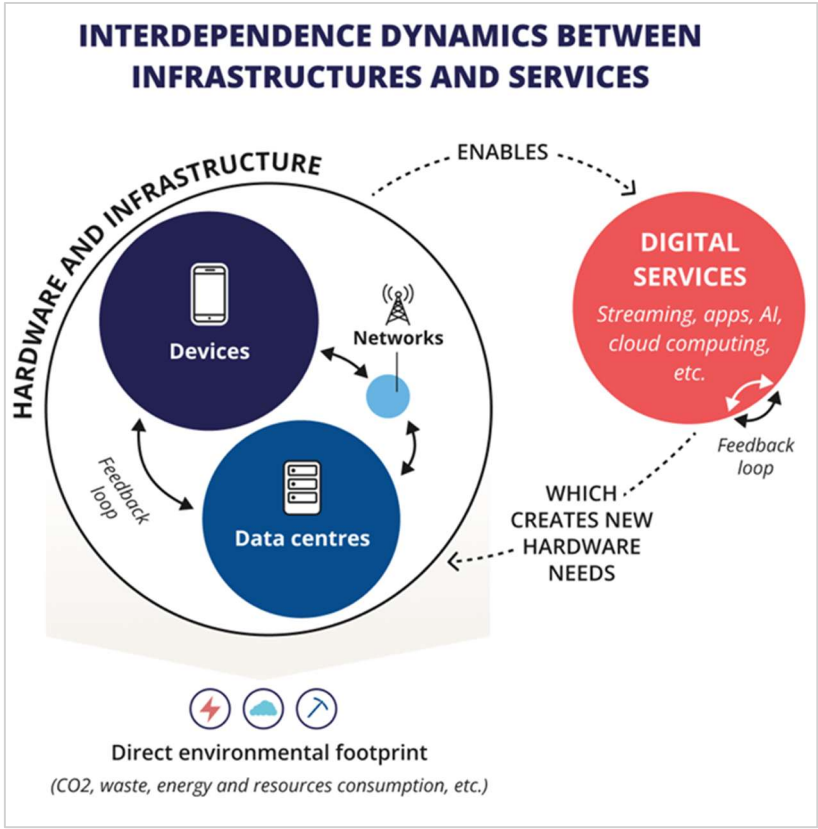
**IN FRANCE, IF NO STEPS ARE TAKEN, DIGITAL'S GHG EMISSIONS COULD TRIPLE BY 2050**

(ADEME-Arcep study, 2023)




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

- **Digital services create new hardware needs:** the design and use of services have an impact not only on digital infrastructures and networks, but also on end-user devices (*i.e.*, the three interdependent building blocks which enable digital services).
- **Interdependence among the elements of the digital value chain** (such as networks, data centres, devices, digital uses, etc.); digital uses having a significant impact on the whole.



# … to action!

Concrete design choices to reduce the footprint of digital services from France's voluntary guidelines published in May 2024 by Arcep and other public bodies.




## WHY

### ECODESIGN MATTERS FOR DIGITAL SERVICES

**Digital services** (websites, applications, video streaming, AI, etc.) **have a tangible environmental footprint, even if they appear non-physical.**

**EU ecodesign requirements** (*e.g.*, ESPR) **focus on physical products.**

Extending the discussion to software and digital services would **better allocate accountability to reduce environmental impacts of ICTs.**

**Ecodesigning builds**, notably, **on greater efficiency: doing better with less resources.**

## HOW

### FOUR EXAMPLES OF PRACTICAL LEVERS

1) **Keep devices in use longer**

Build websites and apps that work on older devices, avoiding unnecessary hardware replacement.

2) **Design lighter digital services**

Enable an energy-saving mode by default, use of efficient and optimised resolution and compression technics for video content, limit unnecessary features, data transfers and storage.

3) **Improve user information & usage control**

Promote reliable and clear environmental information on digital services, avoid attention-grabbing technics by default (*e.g.*, autoplay and infinite scrolling), offer an easily accessible audio-only mode when the video is not needed.

4) **Use AI where it adds value**

Where appropriate, favour smaller, less resource-intensive models over more demanding alternatives.

## WHERE

### RELATED EU POLICIES

**Environment**
Transparency, efficient and ecodesign of hardware components and sustainable AI (*AI Act, ESPR*).

**Consumer**
User control, environmental transparency, obsolescence (*DFA, EU Kids Act*).

**Digital & telco**
Efficient content delivery and configuration options (*DNA*).