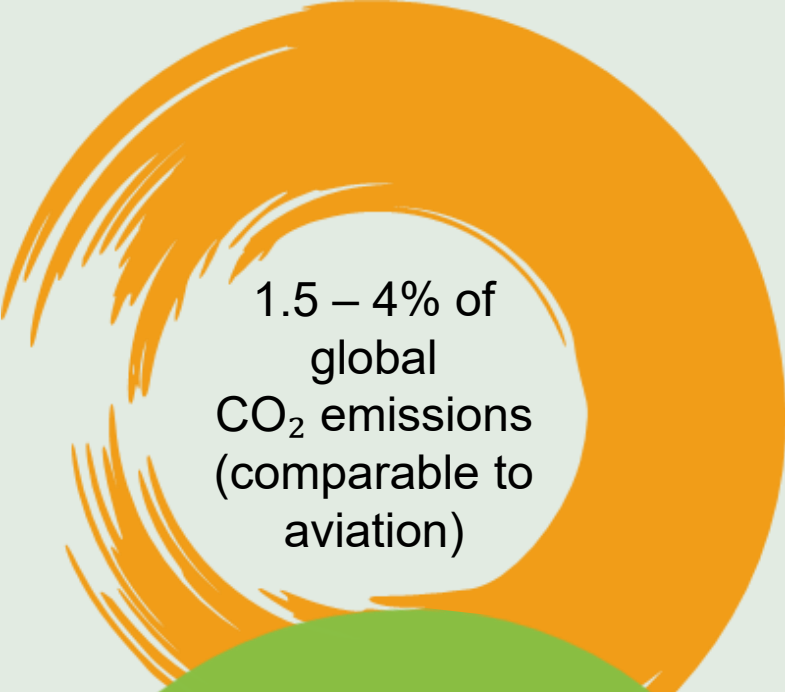


Digital Carbon Footprints

Decarbonising Digital

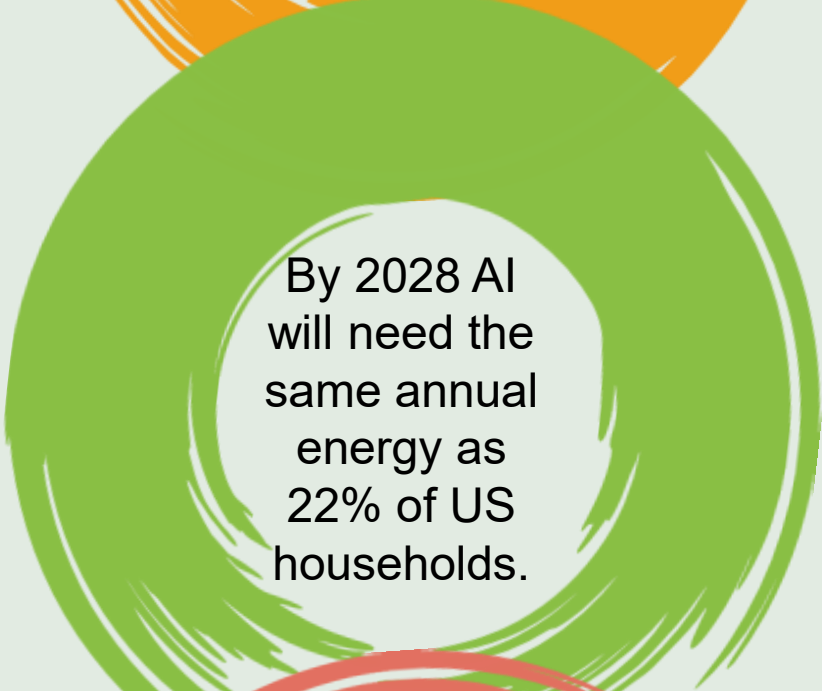


Digital and Data



1.5 – 4% of
global
CO₂ emissions
(comparable to
aviation)

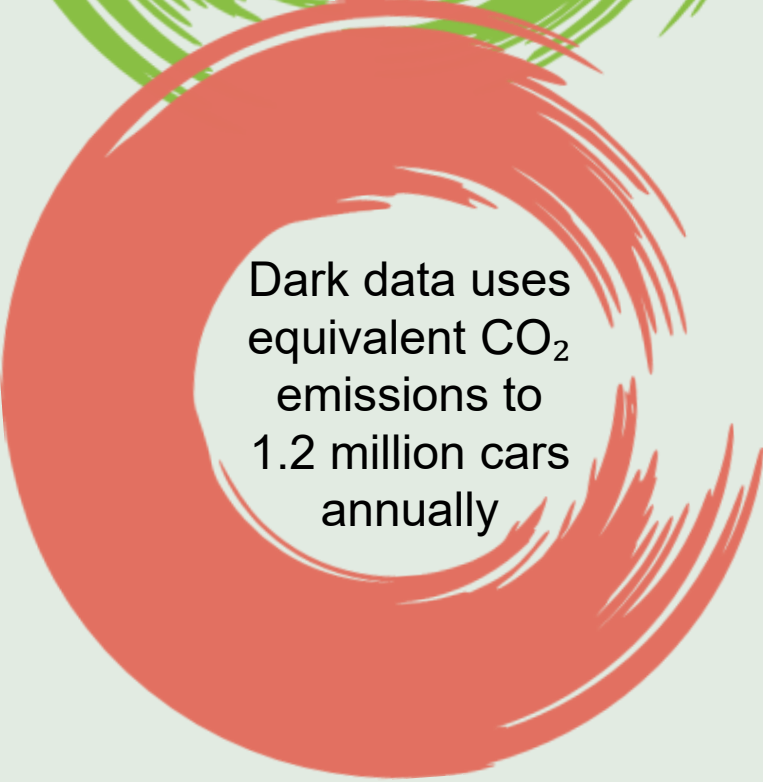
It is difficult to precisely quantify the exact share of digital emissions in global CO₂ emissions. This is an estimate of current global emissions.



By 2028 AI
will need the
same annual
energy as
22% of US
households.

2005-2017 the amount of electricity going to data centers remained quite flat.

This all changed with AI which has led data centres to double their electricity consumption by 2023.



Dark data uses
equivalent CO₂
emissions to
1.2 million cars
annually

Dark data refers to the data that is used once and then never revisited again. Things like memes, photos, videos, etc. They all have a footprint.

Researchers at Loughborough University discovered that 68% of data used by companies is never used again

Everyday Habits

- Stream in standard definition unless HD is essential.
- Turn off video in calls when it adds no value.
- Use Wi-Fi over mobile data.
- Reduce duplicate attachments – use shared documents and links to files.
- Shut devices down overnight; minimise background apps.
- Delete downloads, screenshots, duplicates; empty recycle bins.

Dark Data

- Old files, legacy systems, unused inboxes, duplicate drives.
- Quarterly data clean-ups with clear ownership.
- Apply retention policies and automatic deletion.
- Stop exporting unused reports; streamline analytics.



Responsible AI Practices

- Use the lightest model for the task.
- Avoid unnecessary long outputs or repeated generations.
- Reuse existing prompts/assets instead of regenerating.
- Include resource impacts in AI training.
- Treat AI access as a privilege – use intentionally, not excessively.

Organisation-Level Actions

- Consolidate tech stacks to cut storage fragmentation.
- Advocate for, and where possible use renewable-powered and closed-loop data centres.
- Automate data lifecycle management.
- Set file size and retention expectations organisation-wide.