



# Digital Preservation and the Climate Emergency

Focus on Climate Action:

- DPC Climate Action Plan
- Climate Actions (not all good)

Focus on Emissions:

- DP and Emissions
- Emissions and DP

Focus on Everything:

- DP and Everything Else
- What is to be done?

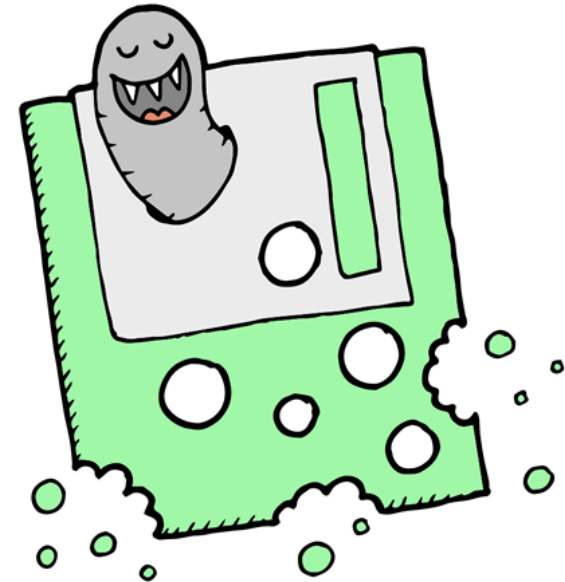
Climate Action Plan ...

“the **series of managed activities** necessary to ensure **continued access** to digital materials for **as long as necessary**... beyond the limits of media **degradation**, technical **obsolescence** or organizational **change**.”

(Digital Preservation Handbook)



DP is a sustainability challenge. We cannot address the climate emergency without (some) digital preservation.



## **Climate Action Plan: DPC as climate action laboratory**

... there is a growing demand for advice, standards and training which have always been core services within the DPC's strategic plan. Moreover, by modelling good practice ... we are better positioned as advocates for change.

<https://www.dpconline.org/about/dpcpolicies>

<https://www.dpconline.org/docman/about-1/dpc-policies-and-forms/3094-dpc0923g-climate-action-plan-draft>

Climate Actions (not all good)

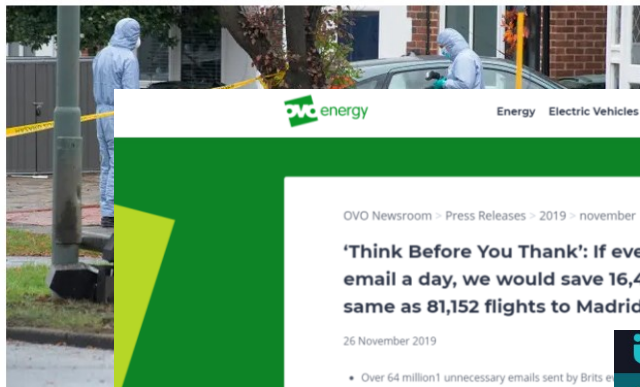
# Bomb attack on Ulez camera 'grotesquely irresponsible', says London mayor

Blast in Sidcup not being treated as terrorism but counter-terror officers are leading investigation

Peter Walker Deputy political editor

@peterwalker99

Fri 8 Dec 2023 17:55 GMT



Forensics checked for homemade bomb

The London attack in which



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## 'Think Before You Thank': If every Brit sent one less thank you email a day, we would save 16,433 tonnes of carbon a year - the same as 81,152 flights to Madrid

26 November 2019

- Over 64 million unnecessary emails sent by Brits every day
- Unactionable one or two word pleasantries such as 'thank you' or 'I'm sorry'
- Each UK adult sending one less 'thank you' email a day would save 16,433 tonnes of carbon a year - the same as 81,152 flights to Madrid or taking 3,3343 diesel cars off the road
- OVO Energy is calling upon the UK to 'Think Before You Thank' to prove the point that by cutting down on junk we can reduce our carbon footprint

26 NOVEMBER 2019 – Research released today reveals that the average UK adult sends one less 'thank you' email a day.

The research commissioned by OVO Energy, the UK's leading energy supplier, shows that the UK's leading energy suppliers (72%) are completely unaware of the carbon footprint of their email usage. This lack of knowledge is resulting in excessive carbon emissions, contributing to the UK's carbon footprint.

Whilst emails are an integral form of communication in the modern world, 49% of Brits confess to sending unnecessary emails every day, contributing to the UK population's carbon footprint. Unactionable one or two word pleasantries such as 'thank you' or 'I'm sorry' are the most common types of unnecessary emails.



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## Ovo Energy apologises after telling customers to 'cuddle pets' to stay warm

WEST COUNTRY | ENERGY | BRISTOL | Tuesday 11 January 2022 at 7:02am



Ovo Energy's headquarters in Bristol. Credit: Google Maps

One of Britain's largest energy suppliers has apologised after it suggested customers cuddle pets and eat

William Kilbride  
John McMillan

DP and emissions ...

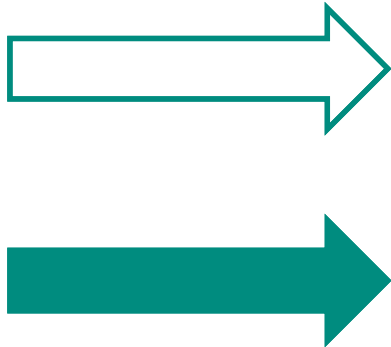
## Focus on Emissions



$\text{CO}_2$   $\text{CH}_4$   $\text{N}_2\text{O}$  HFCs PFCs  $\text{SF}_6$



## Calculating Emissions in DP



- **Scope 1:** Direct emissions from the combustion of fuel in assets that a company operates: company-owned cars, diesel generators, gas boilers and air-conditioning leaks.
- **Scope 2:** Indirect emissions from the generation of energy purchased from a utility provider, such as heating, cooling, steam, and electricity.
- **Scope 3:** All indirect greenhouse gas emissions that do not fall under scope 2 - upstream and downstream.
  - Upstream emissions from goods and services, business travel, utilities supplied but not purchased
  - Downstream emissions from goods or services which are sold

## Focus on Scope Three

### Upstream

- ★ 1. Contracted Goods and services
- ★ 2. Capital goods
- ☆ 3. Fuel or energy (not in scope 1 or 2)
- 4. Upstream shipping and distribution
- ★ 5. Waste generated in operations
- ★ 6. Business travel
- ★ 7. Employee commuting
- 8. Upstream leased assets

### Downstream

- 9. Downstream shipping and distribution
- 10. Processing of sold products
- 11. Use of sold products
- 12. End-of-life treatment of sold products
- 13. Downstream leased assets
- 14. Franchises
- ☆ 15. Investments

**Digital Preservation Shows Up Here** ★

## Focus on Business Travel

Month	Travel	Method
Aug / Sept 23	Business Travel	Flights
Sep-23	Business Travel	Flights
Sep-23	Business Travel	Flights
Oct-23	Business Travel	Flights
Sep-23	Business Travel	Flights
Sep-23	Business Travel	Flights
Sep-23	Grant recipient	Flights
Sep-23	Grant recipient	Flights
Sep-23	Grant recipient	Flights
Sep-23	Grant recipient	Flights

https://scif.org.uk/web/carbon-calculator/

**scif.** About Partner with us News Projects Carbon Calculator Get in touch

## Travel Carbon Calculator.

The Sustainable Climate Impact Fund (SCIF) prioritises projects that deliver health and socio-economic benefits to communities as well as tackling climate change. Use the SCIF travel carbon calculator to work out your travel emissions in two simple steps. Then see how SCIF helps you offset unavoidable emissions in an ethical and responsible way.

**Journey 1**

Transport: Select your option Departure: Where from? Arrival: Where to? Passengers: 1 [Add Journey](#)

☐ Return

**Transport:**

**Your travel emissions in 2 steps**

- 1 Add journey(s)
- 2 Calculate emissions

**Results**

**Emissions per 1000km**

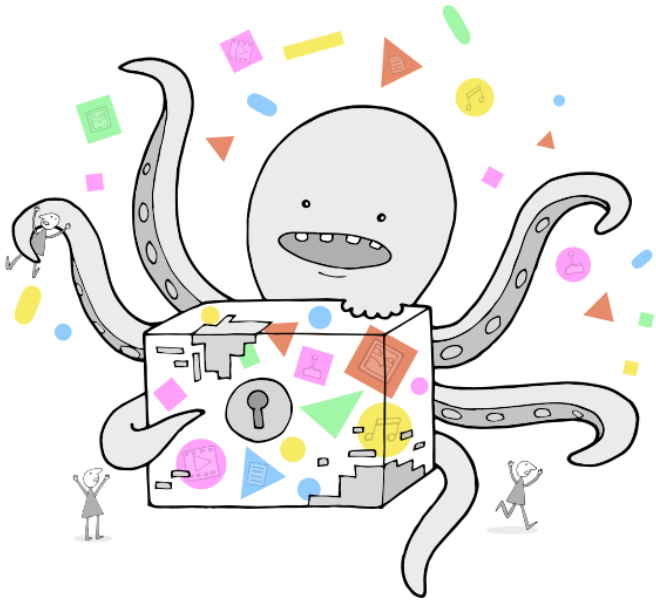
Mode	Level
Train	Low
Bus	Low
Car	Medium
Plane	High

Offset your carbon through SCIF

## Whose emissions are they any way

	Month	Travel	Method	Metric tonnes of CO2	Suggested Offset*
	Aug / Sept 23	Business Travel	Flights	4.71	£60.09
	Sep-23	Business Travel	Flights	4.93	£62.90
	Sep-23	Business Travel	Flights	0.82	£10.46
	Oct-23	Business Travel	Flights	0.18	£2.30
	Sep-23	Business Travel	Flights	1.72	£21.40
	Sep-23	Business Travel	Flights	0.23	£2.92
	Sep-23	Grant recipient	Flights	3.6	£45.71
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	Sep-23	Grant recipient	Flights	0.87	£11.05
	Sep-23	Grant recipient	Flights	1.72	£21.84
			TOTAL	9.79	£284.38
Zoom Meetings	No of Meetings	Total Participants	Total Minutes	Metric tonne of CO2	Suggested Offset
Aug-23	61	330	2503	0.0021	£0.03
Sep-23	72	569	3867	0.0032	£0.04
Oct-23	76	864	4239	0.0035	£0.05
			TOTAL	0.0088	£0.11
Quarter 1 Draft Totals			TOTAL	9.7988	£284.49

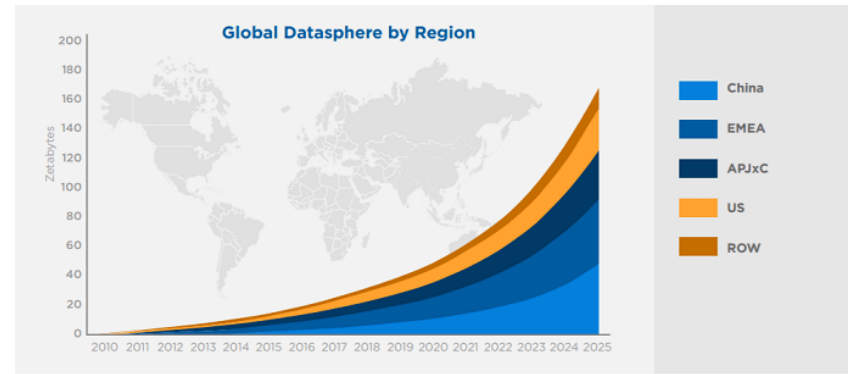
## Point is: DP is mostly scope three



Scope 3 been a lower priority (so far)  
Trickier to calculate  
Harder to control  
Boundaries less clear

## Steady State Paradox in DP

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Driving down emissions in the context of exponential growth  
(standing still is not net zero)

**We own the emissions side of the equation.  
We don't own the data growth side.**

Emissions and DP ...



**DP is about keeping data  
(and not)**

Digital detox and clean up  
Crowd-sourcing appraisal?  
*Not* size zero





Digital**Preservation**Coalition

## DP Assumptions

Accessible

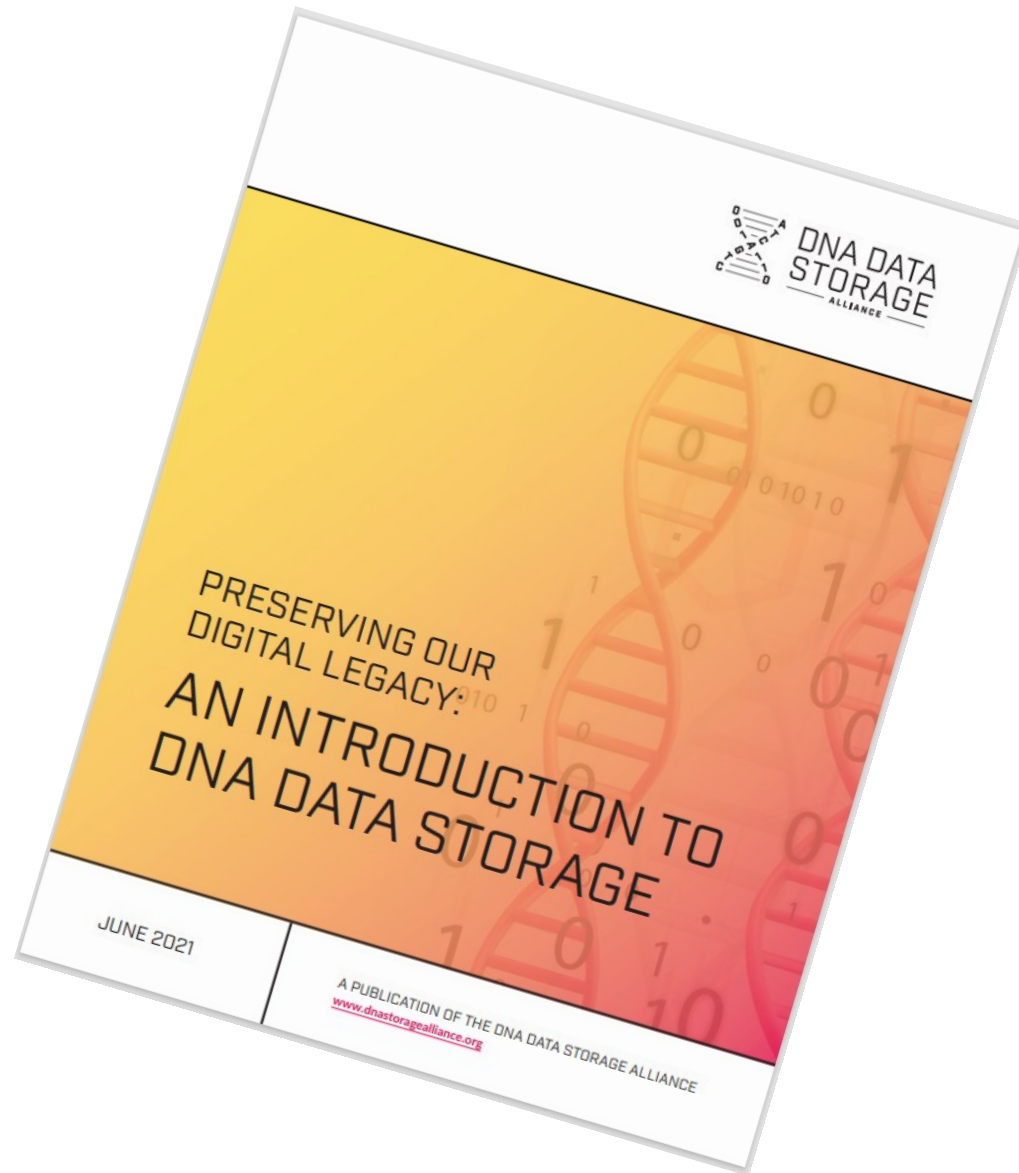
Authenticated

Normalized

Uncompressed

Trusted

What if we shake up these assumptions?





Digital**Preservation**Coalition

## Point is: Climate Crisis is Global Scale

Will affect everyone, everywhere  
Will affect every aspect of our lives  
Will affect professional practice too

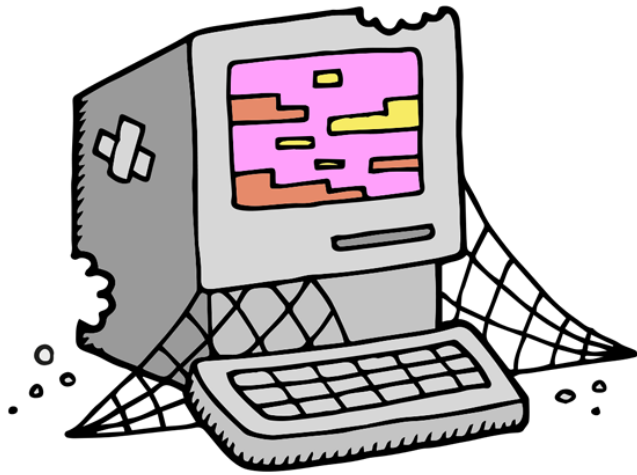


Focus on Everything



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## Not just emissions



E-waste

Competition for Rare Earth Elements

Competition for Water

Exploitative Labour Practices



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## Sustainable Development



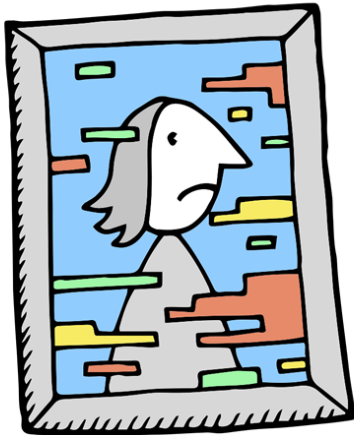
**Digital preservation does not progress in a vacuum**

Not just about emissions  
Not just environment

poverty, hunger, health, education, gender, water, energy, growth, industry, equality, communities, consumption, climate, marine ecologies, land, peace, partnership



## Social and economic forces and DP: From owning to renting



### Buy-to-let example

- Financialization
- Housing crisis
- Dislocation and displacement

### Digital Rent-Seeking Behaviours

- IPR as license as rent
- Platform as a service

**HAS KILBRIDE  
LOST THE RUN  
OF HIMSELF?**





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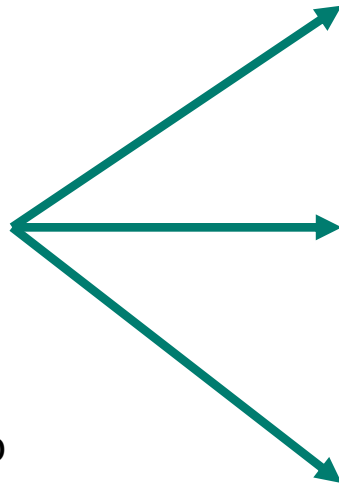
## Here we are

### DP Designed For

Structured and  
unstructured data

Born digital and  
digitised content

From Selfie stick to  
space probe



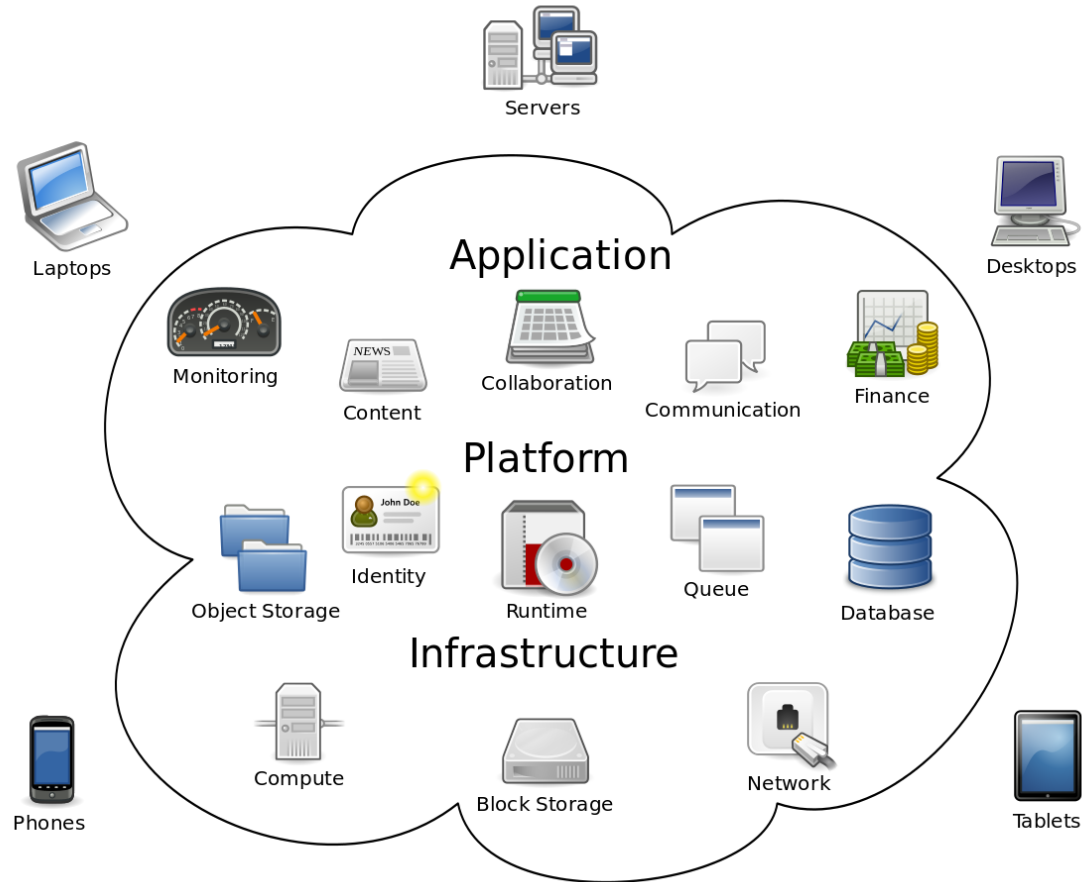
Office Documents  
Digital Photographs  
Digital Video and Audio  
Grey literature  
CAD Plans  
Geo Mapping and GIS  
Transactional Records  
Spreadsheets  
eBooks and eJournals  
Email  
Web pages  
Laser Scans  
MRI and CT scans  
Databases  
Financial data  
Scientific outputs  
SMS Text  
WhatsApp  
...



William Kilbride  
John McMillan

[www.dpconline.org](http://www.dpconline.org)

# Cloud Computing

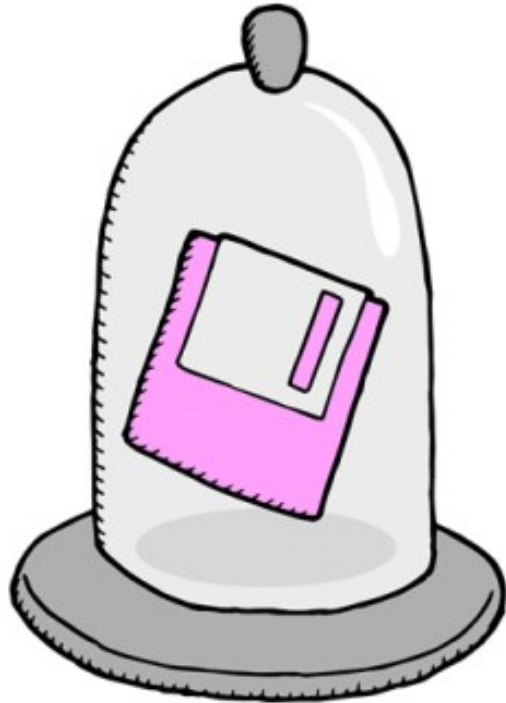


Rent-seeking behaviors  
AKA Precarity as a Service



Digital **Preservation** Coalition

## Meanwhile in Silicon Valley ...



Nook  
GoogleCode  
GeoCities  
GoogleWave  
knol  
Yahoo 360  
Yahoo Mail Classic  
del.icio.us  
MyBlogLog  
Flash

EverAlbum  
Flickr (free)  
Google Hangouts  
Duplex  
BlipFoto  
BEBO  
MySpace  
Expeditions  
Enhanced404  
JamBoard (soon)

Any  
Other  
Platform  
Here  
...

**Deprecated, Discontinued and Deleted:  
DP is a response to a certain kind of capitalism**

What is to be done?

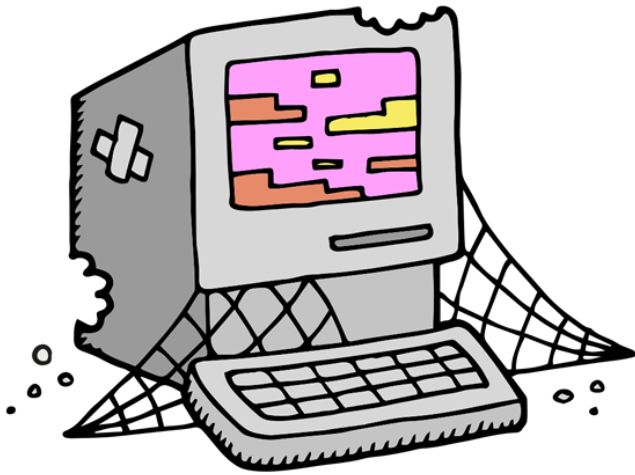


## Bland Conclusion

DP is a sustainability challenge.

We cannot address digital preservation without (some) action on the climate emergency.

We cannot address the climate emergency without (some) action on digital preservation.



# What is to be done?



DPC thinks in 5-year horizons:

- DPC sustainability challenge 2022-27
- DPC Net Zero 2027-32?
- DP Net Zero 2032-37?



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