

How do you calculate the carbon footprint of your digital preservation activities?

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Digital**Preservation**Coalition

Why?

- The climate crisis is real
- Decisions we make today have an impact on the future of the planet
- We need to reduce the carbon footprint of our activities at work
 - (but in order to do so...it is helpful to first understand our carbon footprint)



A question

Do you calculate the carbon footprint of your digital preservation activities?

...follow up question for those who answered 'no'

Would you like to calculate
the carbon footprint of your
digital preservation / curation
activities?

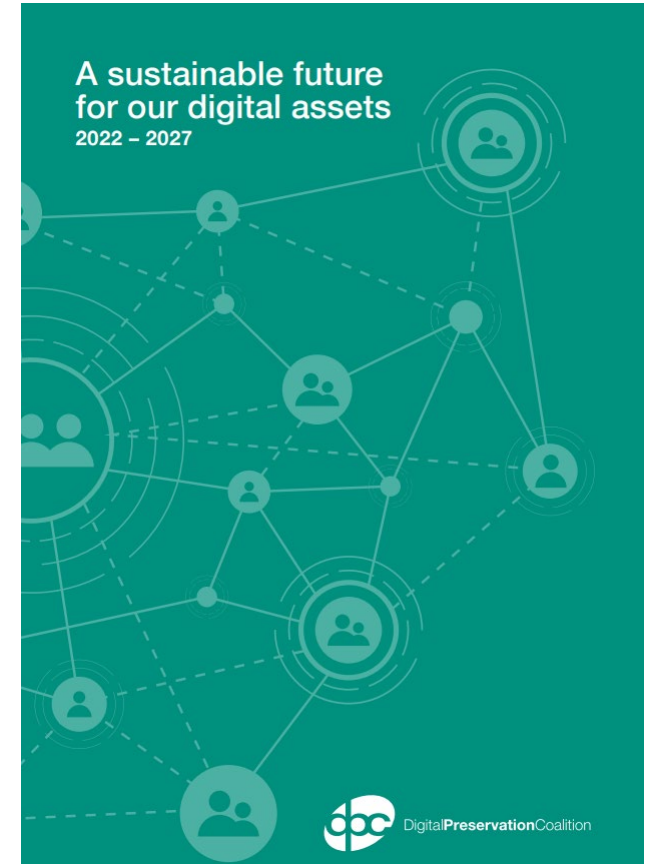
Some background: a little about the DPC

- I am a member of the Digital Preservation Coalition's Executive Board & Jenny is its Chief Preservation Officer
- Established in 2002 to enable digital preservation collaboration
- 170+ Members
- 21 countries
- 14 members of staff

..building a welcoming and inclusive global community, working together to bring about a sustainable future for our digital assets

More background: why do we care about the carbon footprint of digital preservation?

- Members asked the DPC to focus on this topic
- The DPC has specific objectives on its strategic plan (2022-2027):
 - “Take action to combat climate change and its impacts by promoting developments in sustainable consumption for digital preservation”



So...we set up the Carbon Footprint Task Force

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New DPC Task Force on calculating and mitigating the carbon footprint of digital preservation

🕒 Added on 5 December 2024

The DPC are establishing a new task force for 2025 with a focus on calculating and mitigating the carbon footprint of their digital preservation activities. The terms of reference for this new group can be found [here](#). This group will meet monthly for a period of a year to develop and communicate good practices and standards for how to calculate the carbon footprint of their organization's digital preservation activities.

The group is intended to provide a supportive forum for making contacts, building relationships, learning from peers, overcoming roadblocks and obstacles, and sharing successes and challenges. At the end of the year the group will disseminate their learnings through events, publications, and a series of worked case studies so the whole community can benefit from the work that has been carried out.

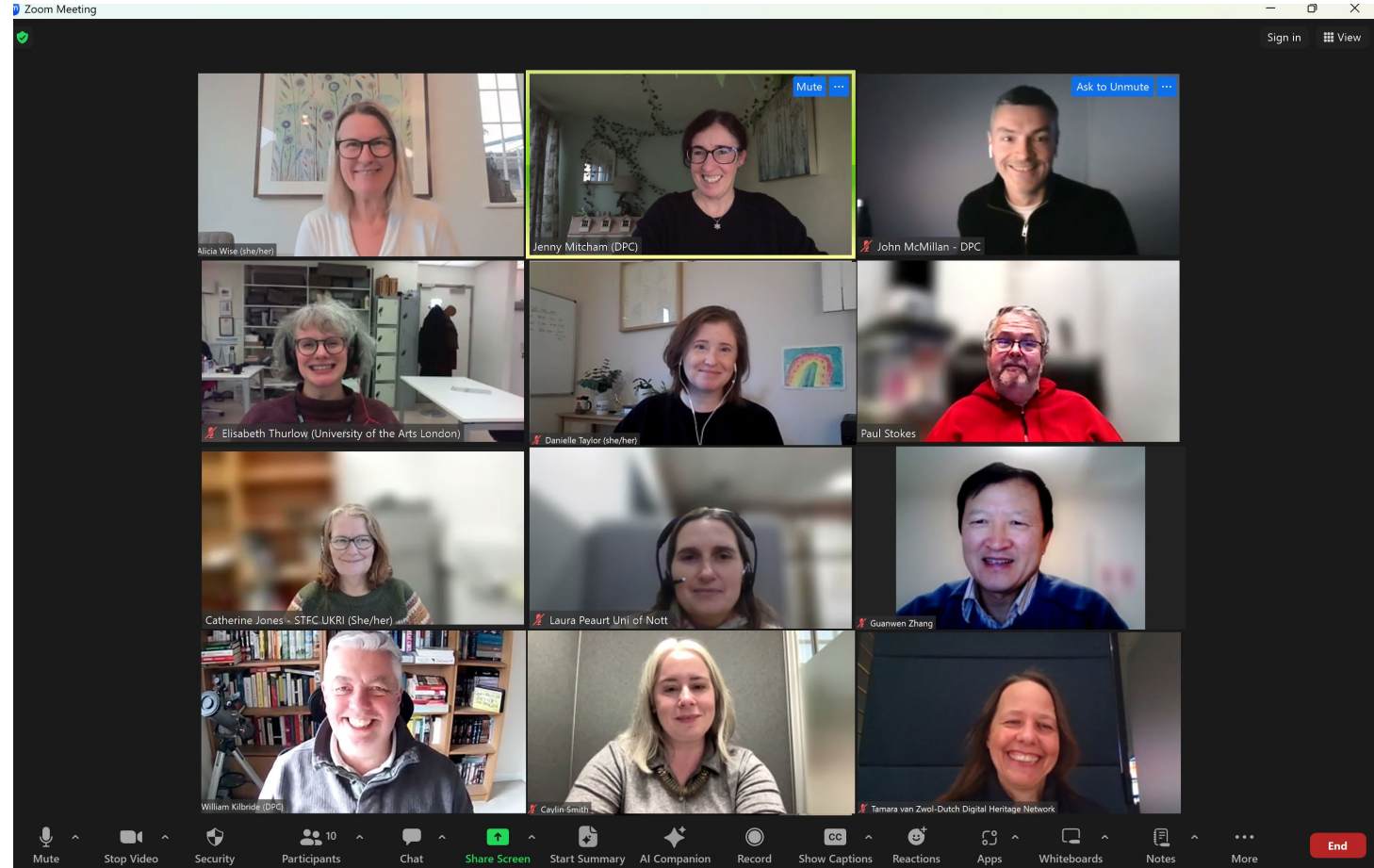
This new Task Force will start in January 2025. Meetings will be chaired by Alicia Wise and hosted on the DPC's Zoom platform.

We are seeking task force members who are actively working on calculating the carbon emissions from their digital preservation activities and who will have time to devote to sharing and discussing this work in monthly group meetings throughout 2025. In order to keep meetings focused and productive we would like to keep the number of participants to 10-15 people. We know there are many more members interested in this topic so we intend to openly share task force outputs and findings at the end of 2025.

If you would like to join this new task force, please contact Jenny.Mitcham@dpconline.org by 18th December to express your interest. Please include a brief note of any work you are involved in to calculate the carbon emissions of your digital preservation activities.

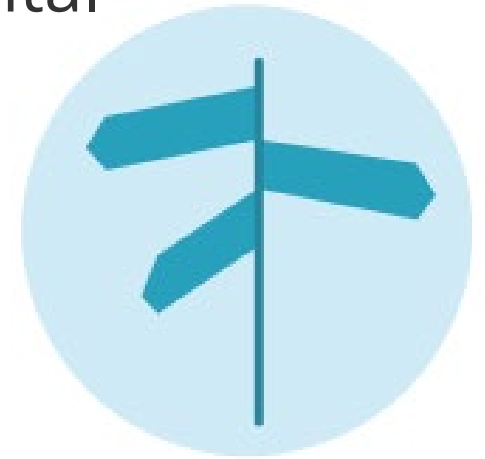
What did the task force do?

- We met monthly from Jan-Dec 2025 to work on this together
- After a few introductory meetings, the group defined its main task
- We decided to create a guide or toolkit to share with the community



Guiding principles for the toolkit

- The toolkit should contain clear, practical and actionable advice and information
- It should demystify carbon footprint calculations for digital preservation and empower readers to take action to calculate the carbon footprint of their own digital preservation activities
- The advice within the toolkit should be applicable regardless of:
 - digital preservation systems/infrastructure in place
 - current experience level with carbon footprint calculations
 - type/sector/size/geographic location of organization



Sections of the toolkit

- Why is this important?
- Getting organizational buy-in
- How and where to start
 - Including a spreadsheet tool
- How to reduce carbon footprint
- Myths and legends
- How digital and physical preservation compare
- Case studies (to be developed)

Data Centres / Serve Activity Type		Combined Monthly Carbon Footprint (kgCO2e/year)		
		On Premises	In Cloud	Total
	Acquisition		44.17	44.17
	Content Preservation		-	0.00
	Bitstream Preservation		-	0.00
	Discovery and Access		-	0.00
	Metadata Management		-	0.00
	Total Data Centres / Server		44.17	66.17

Networking (i.e. communication between sites or offsite tools and services or users)		Combined Monthly Carbon Footprint (kgCO2e/year)		
Activity Type				Total
	Acquisition		0.00	
	Content Preservation		-	
	Bitstream Preservation		-	
	Discovery and Access		-	
	Metadata Management		-	
	Administration		-	
	Serving end user content		-	
	Total Networking		-	3

End User and Admin Devices		Combined Monthly Carbon Footprint (kgCO2e/year)		
				Total
	Total End User and Admin D		73.45	73.4507388

Non-digital Admin		Combined Monthly Carbon Footprint (kgCO2e/year)		
				Total
	Total Non-Digital Admin		0.20	0.2

Sum Total Carbon Footprint				142.82 kgCO2e/year
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The Carbon Footprint Toolkit... coming this month!

- Next steps:
 - Period for testing and feedback
 - Develop a set of case studies that we can publish before iPres
 - Refine and update the guide and toolkit



Thanks!



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