

Europeana Climate Action Community and the path to regenerative digital transformation

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Europeana is the EU initiative dedicated to supporting the digital transformation of the European cultural heritage sector¹. Starting as a platform for collecting, preserving and sharing EU's digital cultural collections, Europeana's mission has evolved into fostering a more accessible, inclusive, and interactive space - the data space². The Europeana ecosystem is built on a collaborative structure involving the Europeana Foundation³, the Europeana Network Association (ENA)⁴ and the Europeana Aggregators' Forum⁵, achieving multi-level digital capacity building.

One of the key thematic communities within the ENA is the Climate Action Community (CAC)⁶. Founded in response to growing environmental concerns, the CAC brings together practitioners committed to embedding environmental sustainability in digital cultural heritage. It serves as a collaborative hub for collective learning and action, enabling professionals from across the sector to explore sustainable and regenerative alternatives to "digital as usual". Aligned with the goals of the European Green Deal⁷ and the EU Work Plan for Culture (2023-2026)⁸, the CAC has emerged as a driving force in addressing one of the most pressing challenges of our time: the environmental footprint of digital cultural heritage.

A community response: The Environmental Sustainability Practice Task Force

Within the Climate Action Community, the Environmental Sustainability Practice Task Force⁹ was born in 2022 out of a need; we aimed to explore how digital preservation practices can be made more environmentally responsible by cultural heritage institutions (CHIs), however, we had no data of the real-life practices employed and how they

¹ <https://www.europeana.eu/it/about-us>.

² <https://pro.europeana.eu/page/common-european-data-space-for-cultural-heritage>.

³ <https://pro.europeana.eu/about-us/foundation>.

⁴ <https://pro.europeana.eu/europeana-network-association>.

⁵ <https://pro.europeana.eu/page/aggregators>.

⁶ <https://pro.europeana.eu/page/climate-action-community>.

⁷ https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en.

⁸ [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022G1207\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022G1207(01)).

⁹ <https://pro.europeana.eu/project/environmental-sustainability-practice-task-force>.

are scoring in terms of sustainability. To investigate this issue in depth, the Task Force launched a sector-wide Sustainability Practice Survey in 2023, that gathered insights from 108 professionals across 24 EU Countries and six others. Libraries, academic and research institutions, museums, and archives were all represented.

The results are making up the report *Regenerative Digital Transformation: Sustainable Pathways for Cultural Heritage Institutions* – a comprehensive analysis of how environmental sustainability is (or isn't) embedded across the full digital preservation lifecycle¹⁰. To deepen the analysis, three case studies were conducted with the National Library of Finland, the International Museum network, and POLIN Museum in Warsaw. These in-depth interviews revealed promising practices, as well as the barriers that CHIs face when attempting to adopt more sustainable digital methods.

Key insights: where we stand and what needs to change

The report reveals a growing awareness of environmental responsibility in the sector: around 80% of CHIs acknowledge their responsibility. Yet only 42% of surveyed institutions have formal environmental strategies, and a mere 14% track the carbon footprint of their digital services.

Most notably, many organisations continue to treat digital preservation as a siloed, project-based task – lacking coordinated strategies for content selection, long-term storage, and data lifecycle management. In fact, 57% of institutions lack policies governing the deaccessioning or retirement of digital assets, contributing to the rise of so-called “dark data”, that is data preserved by organisations but never accessed. Also, redundant data storage practices are widespread –86% of CHIs keep three or more backup copies of their digital assets, yet few assess the environmental cost of these practices.

Coming to hardware, a major blind spot is procurement. While 17% of respondents report adopting recycling initiatives, only 8% consider hardware repairability, and a strikingly low 3% include sustainability criteria when purchasing new equipment. Links greatly back to the environmental cost of ICT infrastructure, not just by emphasizing the energy consumption of EU data centers (up to 65 TWh of electricity in 2022), but mainly by highlighting the hidden impact of manufacturing digital devices, which often rely on rare minerals extracted under environmentally and socially exploitative conditions.

These are only a few of the insights that are calling for a paradigm shift in how CHIs think about sustainability. The report is taking that a step further and encourages CHIs to adopt a regenerative practice. That means to design their digital preservation processes in a way that – rather than focusing solely on reducing harm – to actively restore ecosystems, support communities, and promote equity.

¹⁰ <https://pro.europeana.eu/post/regenerative-digital-transformation-sustainable-pathways-for-cultural-heritage>.

Our collective way forward

The Europeana Climate Action Community's work is a timely reminder that cultural heritage is not just about the past – it is also about the kind of future we want to shape, while facing a climate crisis. The digital preservation decisions made today will impact generations to come, and as stewards of memory, CHIs hold the power to lead this transformation, and this boils down to aligning their mission of safeguarding memory with a commitment to environmental justice.

The full report, including survey results, CHIs' recommendations, case studies, and policy recommendations, is available online at Europeana Pro¹¹.

The Climate Action Community invites all cultural professionals to join and be part of this ongoing, sector-wide effort toward a more sustainable – and regenerative – digital future.

¹¹ See the previous footnote.