

# SUSAN HAZAN

Digital Heritage, Israel | [susan.hazan@gmail.com](mailto:susan.hazan@gmail.com)

**The Foundation, The Network and the Climate Community  
come together to locate Climate Action in Europeana.**

## **Abstract**

This paper focuses on the implications of digital museum holdings and how cultural heritage institutions are managing their digital content and transactions while facing the climate emergency. The effects of climate change are already impacting cultural heritage in many ways, threatening our heritage landmarks, buildings, and collections. Inspired by New European Bauhaus (NEB), we are motivated to create cultural practices that can help our sector translate the Bauhaus vision into innovative and transformational urban-regeneration and efficient green-transformative processes including digital initiatives and practices. Only when we acknowledge that climate change is an emergency and make the sectoral decision take joint action will we be able to reverse this momentum and work towards a greener future. Speaking from the perspective of Europeana as an Initiative that represents over 4,000 museums libraries and archives across Europe, this paper discusses how Europeana works towards both a digital AND a green future. It is not enough simply to praise our paperless office, our digital collections systems, and electronic communications. We need to turn our attention to think about both the short- and long-term impact of our digital practice and, as soon as possible, learn to make the right choices. We turn for inspiration here to the NEB initiative directed by the European Commission to think green, sustainable and affordable, alongside accessible, inclusive, and beautiful and impacting all aspects of how we live.

## **Keywords**

Climate; Europeana; Crisis; Bauhaus; Digital sobriety.

## Introduction

At a tumultuous time of change and challenge, when museums and other cultural heritage institutions need to reflect on how to adapt and evolve there are many critical issues to consider concerning resilience, development, sustainability in a society that is going through ruthless jolts of upheaval. Speaking from the perspective of Europeana as an Initiative that represents over 4,000 museums libraries and archives across Europe, this paper discusses how Europeana and the digital transformation work in tandem with the museum ethos to collect, conserve, stage and interpret unique physical objects. Managing these digital collections in a central portal, at a time of climate emergency, Europeana has a responsibility to act as an agent of change to encourage best practice and digital sobriety in confronting climate challenge across the sector.

### 1. Europeana

Europeana imagines a cultural heritage sector powered by digital and a Europe powered by culture, giving it a resilient, growing economy, increased employment, improved well-being, and a sense of European identity. To enhance the process of digital transformation, Europeana develops expertise, tools, and policies to embrace digital change and encourage partnerships that foster innovation. This makes it easier for people to use cultural heritage for education, research, creation, and recreation towards an open, knowledgeable, and creative society. In this way, digital transformation enables both the process and the result of using digital technology to transform how an organization operates and delivers value which in turn, supports them to thrive, fulfil their mission and meet the needs of its stakeholders.

The Europeana Foundation with some 60+ staff, the Europeana Network Association with over 3,300 members from Europe and beyond, and the Europeana Aggregators'

Hazan, S. (2023). The Foundation, The Network and the Climate Community come together to locate Climate Action in Europeana. In P. M. Homem (Ed.), *Integrated risk management in museums. Past lessons, future ways* (pp. 169-187). Porto: FLUP. <https://doi.org/10.21747/978-989-9082-15-1/inta9>

Forum with 40 regional, national, domain and thematic aggregators and representing 4,000 archives, libraries, museums, and other cultural heritage institutions are collectively referred to as the Europeana initiative (Fig. 1).

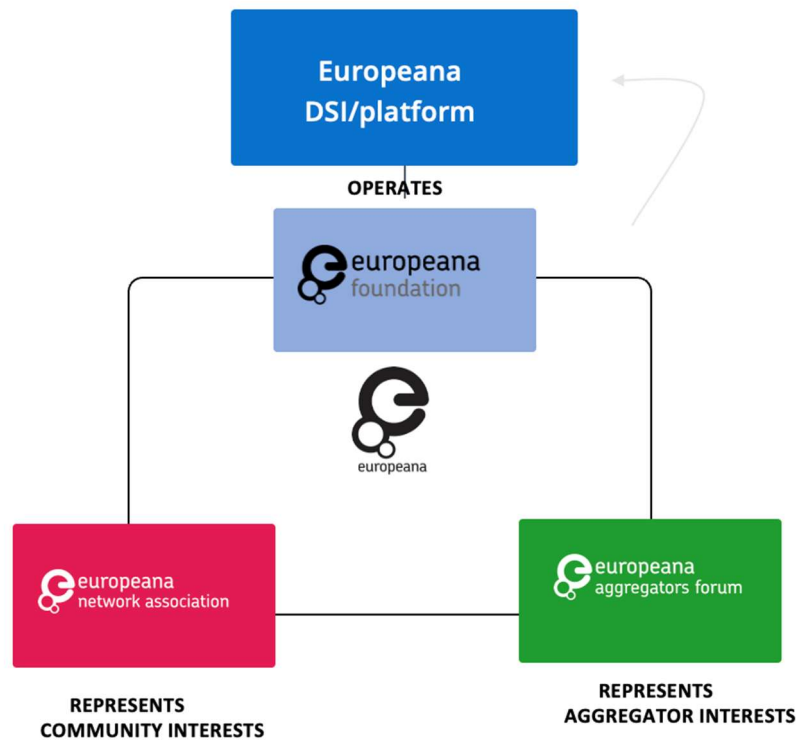


Fig. 1. The Europeana Initiative.

Led by the Climate Action Group, for more than two years all parts of Europeana came together and agreed to advocate for and embed working practices that minimize the digital cultural heritage sector's impact on the climate and environment, culminating in the Climate Action Manifesto (Europeana, 2021), launched at the Europeana 2021 conference.

Informed by the Green Team, Europeana continually develops eco-thinking and green practices, to build capabilities to maintain a sustainable workplace. The Green Team acts as focal point for the Initiative to frame questions, investigate processes and raise awareness around the impacts of digital AND green transformation; for example, how

to investigate and help reduce our carbon footprint. In a recent post, *Researching our carbon footprint - findings and tips from the Europeana Foundation*, Patrick Ehlert, Shadi Ardalan explain how developing solutions to the climate emergency and environmental challenges is not an easy journey, but starts with understanding our impact and our footprint. The Green Team shared the results of their 2020 carbon footprint investigation to inspire and help other organisations. *To gain an overview of the Europeana Foundation's carbon use in 2020, we investigated our footprint from our entire value chain* they explained. *'This included our digital services and our corporate operations: working from home and at the office, and our business travel. In cases where that data wasn't available, we relied on secondary sources, including industry averages. Some exclusions due to lack of data included staff's daily commutes, manufacturing or disposal of computer devices, and overnight stays during business trips* (Ardalan, & Ehlert, 2022). From their work, they estimated that the Europeana Foundation's carbon footprint in 2020 was 87,300 kg CO<sub>2</sub>e. In everyday terms, according to the United States Environmental Protection Agency calculator (EPA, 2020), this total 2020 carbon footprint is equivalent to the energy use of 11 homes for one year, the consumption of 202 barrels of oil, or charging 10,619,403 smartphones.

Switching to a green hosted server additionally decreased the carbon footprint and once measures were adopted, such as how to host a sustainable event (Jarrett, 2019) things improved even further. Events were hosted through a strategic choice of venue and the catering – local, seasonal, vegan, and vegetarian were taken up with obvious enthusiasm by all stakeholders concerned. Once the events were announced as 'Green' this encouraged others to follow suit and the ripple effect did the rest. Raising awareness, sharing what they learn along the way, promoting sustainable, environment, and climate friendly practices across the Europeana networks became the norm. Europeana staff chose to travel by train, bike or walk to work after becoming aware of their air travel footprint, and the entire initiative adopted a holistic green approach in a surprisingly short time.

Digital sobriety is all about reducing the ecological footprint of our daily digital lifestyles, and in the workspace. In an interesting call to action concerning *Digital health at the age of the Anthropocene* (Chevance et al., 2020), the mental health sector called for digital temperance instead of overconsumption and overpromotion. Recognizing that while most data flows are attributable to services from the GAFAM/BATX group (ie, Google, Apple, Facebook, Amazon, and Microsoft; Baidu, Alibaba, Tencent, and Xiaomi) professionals from the mental health sector declared that they had a responsibility to make their own green choices. Digital health technologies have revolutionised medical practice, they argued, and could feasibly reduce carbon emissions via strategies such as telemedicine. They were not arguing to stop scientific and medical progress, rather to raise awareness and offer possible actions towards a more sustainable digital health system. Culture heritage professionals too need to consider their actions and how to manage digital resources and practices across the sector. We turn for inspiration here to the New European Bauhaus (NEB) (European Union, s.d.) initiative directed by the European Commission to think green, sustainable and affordable, alongside accessible, inclusive, and beautiful and impacting all aspects of how we live.

## 2. The New European Bauhaus

What does it mean when the NEB initiative wants to put beauty, inclusivity, and sustainability at the heart of how we live? (Fig. 2) These are all admirable qualities but demands fresh perspectives and actions think about how we can improve our everyday quality of life. The call essentially asks us to think about bringing design principles together with art and culture to work alongside modern science and technology. The Bauhaus School was founded in 1919 in the city of Weimar by German architect Walter Gropius (1883–1969). Its core objective was a radical concept: to reimagine the material world to reflect the unity of all the arts.

Hazan, S. (2023). The Foundation, The Network and the Climate Community come together to locate Climate Action in Europeana. In P. M. Homem (Ed.), *Integrated risk management in museums. Past lessons, future ways* (pp. 169-187). Porto: FLUP. <https://doi.org/10.21747/978-989-9082-15-1/inta9>



Fig. 2. The New Europeana Bauhaus.

We now need to re-imagine the world, based on the same principles (Casciato, Fox, & Rochester, s.d.), and as the original Bauhaus School evolved in the wake of the Spanish flu (Fig. 3), we too need to think about the new challenges we are facing today.



Fig. 3. Auto plant workers in Michigan wear masks to protect themselves from the Spanish flu, 1918.

©The Flint Journal.

Marcel Breuer helped to create designs that would fight future outbreaks. After a significant outbreak of tuberculosis in 1882, and the Spanish flu pandemic of 1918, there was need for new furnishing that could be easily cleaned from lurking flu germs. With these goals in mind, Breuer helped create minimalist pieces using hygienic wood and tubular steel. Before this period, overstuffed furniture was popular, but it was found to hold bacteria. To combat that problem, these new styles used aimed to use less fabrics (Fig. 4).

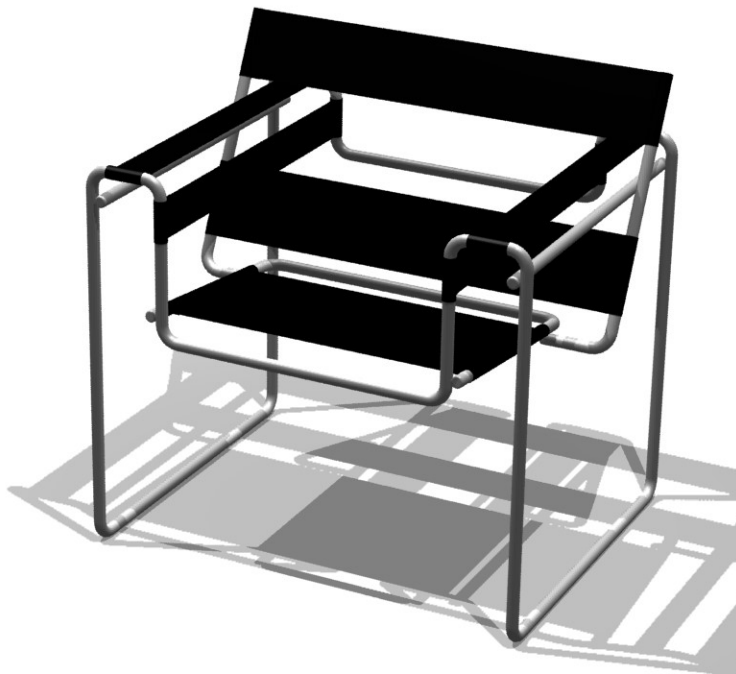


Fig. 4. Wassily Chair, B3, design By Marcel Breuer at Bauhaus School.

In the same way we need to rethink our approach to our daily lives in a multifaceted strategy that considers the complexity of what is at stake. We need to take care of our planet, our natural resources, our climate, and our way of living. In the same way that the famous Bauhaus chairs were reimagined, we need to think about all our actions and how can contribute to mitigating climate damage. The New European Bauhaus called for inspiring examples of how our cultural institutions and heritage contribute to sustainable and inclusive practices, services, and spaces in our communities. It brings a cultural and creative dimension to the European Green Deal and considers green



transition and digital challenges as an opportunity to improve lives of citizens to create beautiful, sustainable, and inclusive places, products, and ways of living.

The Bauhaus principles invite us to come together to learn, discuss and co-create the newest data-driven methods used in architecture, design, and art. They spotlight the kinds of societal and cultural changes we are facing as we witness the accelerating systemic change in the field of design and architecture and the integration of user-oriented thinking more than ever before.

This is a sea-change for the cultural heritage community who can take the up the opportunities that are made possible by the various digital tools now available which can at the same time be disruptive but also game changers.

How does Europeana reimagine the culture heritage sector for climate justice? In a series of blogs, leaders from the sector describe what NEB means for them.

Harry Verwayen, General Director of the Europeana Foundation describes how *The New European Bauhaus initiative's goals and methods resonate strongly within the Europeana digital transformation, our efforts are animated by a broader vision to reimagine the relationship between people, society, and the institutions of European culture. The digital space, he suggests, is integral to our living environment today - we work there, we play there, we come together there. It is as much a part of our daily life as our physical surroundings, and increasingly how we use those spaces and experience them determines our experiences as human beings* (Verwayen & Evans, 2021).

Merete Sanderhoff, Senior Advisor at the National Gallery of Denmark (Statens Museum for Kunst) described the impact of NEB in a similar blog - *To my knowledge, she explained, it's the first time we've seen such a clear and compelling call on the cultural sector to contribute to a more sustainable future. All too often, art and culture are perceived as an add-on once the basic infrastructures of society have been put in place – like decorative icing on the cake. In the New European Bauhaus, art and culture*

*are fundamental to building truly livable societies where we take better care of nature and each other.* (Sanderhoff & Evans, 2021).

The NEB brings a cultural and creative dimension to the European Green Deal, aiming to demonstrate how sustainable innovation offers tangible, positive experiences in our daily life. Climate change and environmental degradation are an existential threat to Europe and the world. To overcome these challenges, the European Green Deal will transform the EU into a modern, resource-efficient, and competitive economy, ensuring:

- No net emissions of greenhouse gases by 2050;
- Economic growth decoupled from resource use;
- No person and no place left behind.

### **3. The Europeana climate action manifesto**

Inspired by the NEB, the Europeana Foundation, the Europeana Network Association, and the Europeana Aggregators' Forum have agreed to advocate for and embed working practices that minimize the digital cultural heritage sector's impact on the climate and environment. To declare our intentions, we launched Europeana Climate Action Manifesto at the Europeana 2021 conference (Europeana, 2021). The Manifesto sets out four guiding principles that will inform the concrete actions the Europeana Initiative have promised to undertake to mitigate climate change through the way we plan, collaborate, operate, and advocate. This declaration shows that we believe that collective action is essential, and that acknowledging climate impact should inform all stages and elements of our work, where both large and small systemic changes can make a difference.



Fig. 5. The Europeana Climate Action Manifesto.

These four guiding principles will shape how we work towards a sustainable digital transformation throughout the Europeana Initiative where each body incorporates these principles into its strategies and working practices. In our planning we will embed eco-thinking and ‘think climate’ from high-level strategy settings to yearly roadmaps and individual planning cycles. This includes setting standards for managing resources and will ensure our supply chains are as ecologically responsible as possible. Through benchmarking our progress by carrying out sustainability audits and impact assessments we will continue to find ways to reduce our carbon footprint in targeted areas.

Collaborating with our partners and networks has always been embedded in all that Europeana does because we believe that we progress faster when we work together. Collaborating with experts, organisations and networks who are similarly committed and who may be further along this journey than we are all serve to strengthen the sector when we harness the expertise and experience of the professionals and organisations in our networks all integral to our ability to address the

complexities of climate change in our sector. Together, we will work towards common solutions, standards, and frameworks for climate-responsible practices for digital culture. Sharing good practices and the challenges we encounter can empower further change at professional and organisational level. We hope our learnings to be helpful for others to use or adapt for their own settings. In this way Europeana's climate actions will be transparent and made available through easy-to-access guides, a new chapter in the Impact Playbook, and ongoing working documents.

We are making systematic changes in the way we operate. We believe that small changes contribute to a big impact and recognise how the development of a climate action strategy will be an important tool to help us to exercise material and digital minimalism in all our operations. As we convene meetings, either physically or digitally, we will minimise the damage we do, from considering the impacts of travel and catering, to the green credentials of the conferencing software we use. One of the personal and institutional principals is the regular clean-up of our digital practice where every individual can make a difference once we follow the principles of digital sobriety in all we do. Good practice such as elimination of digital duplication of the resources we hold, avoiding continuing resending long email threads, and basically dumping any excess files media resources that simply choke up systems and electronic transactions.

We know that change doesn't end with us, and we believe that by leading by example raises awareness of climate issues related to digital cultural heritage and highlight environmentally friendly practices on both individual and organisation levels. It is not only about advocating for climate action it is also about providing support to our members and peers, partner and contributing organisations. When everyone works together to develops their own capacity for making sustainable change, through sharing tools and case studies and providing opportunities for learning and discussion we know that we can make a real difference.

## 4. The Climate Action Community

Established and supported by the Europeana Network Association (ENA), the seven Communities represent like-minded group of people who work together on a voluntary basis to cultivate and share knowledge, expertise and best practices on a specific topic or area of common interest. As the youngest of the seven communities that empower Europeana to act across the Network, the Europeana Climate Community seeks to drive impactful, cooperative, and sustainable action to address the climate emergency and consider the environmental impact of our digital life both at home and at work. Building on the Europeana Climate Action Manifesto declared last November, the Steering Group that drives the Climate Action Community aims for wider systemic and lasting change within our organisations and networks. We believe it's crucial to act now to find new ways to work without compromising our environment. We believe with the right support, guidance, and collaboration we can turn our climate action aspirations into reality. As agents of change, we want to promote and enable change to happen within our communities (Fig. 6) and networks.

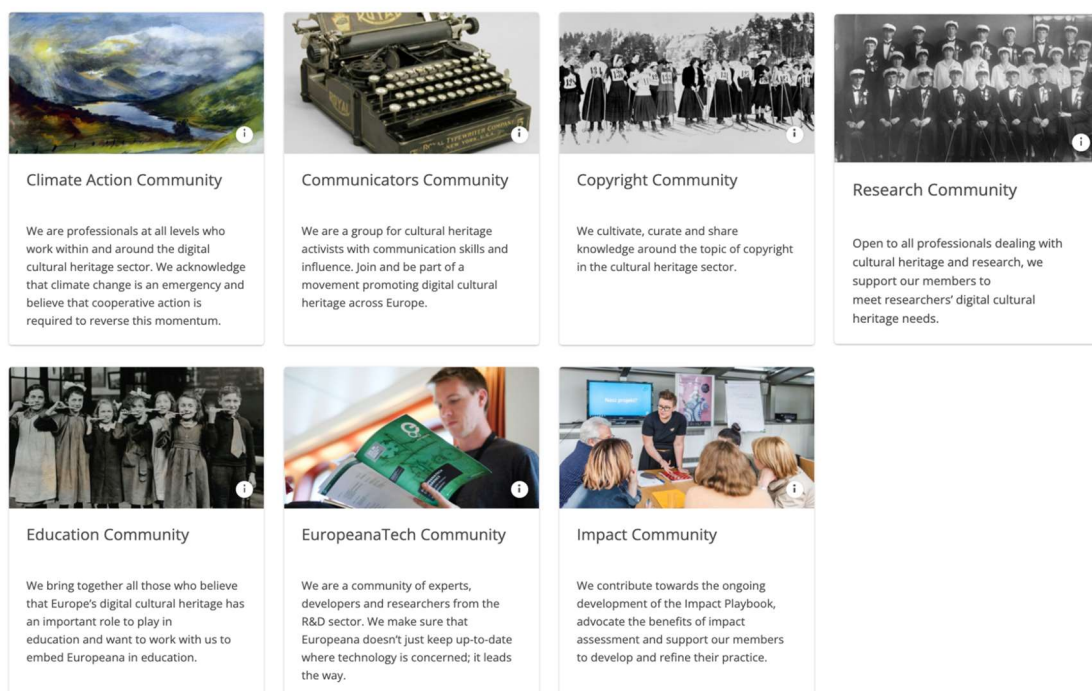


Fig. 6. The Europeana Communities.

The Climate Action Community (CAC) is the youngest of the seven distinct communities and was formed by a dedicated group of like-minded professionals in the cultural heritage sector who acknowledge that climate change is an emergency and believe that cooperative action is required to confront the climate emergency. CAC is devoted to the development of environmentally sustainable internet and digital technologies, and all actions that can contribute to mitigating the climate crisis. In addition to our measures, towards limiting the footprint of digital assets and services by sensible choices made during conceptualisation and development of a digital system the community believes in raising awareness, sharing what we learn along the way, and promoting sustainable, environment and climate friendly practices in our networks. We are determined to find the vernacular, the vocabulary that empowers our messages and to showcase best practices and inspirational curatorial and editorial activities across the sector to amplify this urgent message.

In a short span of 8 months, we have already come together as team to plan our action and activities together. While we are just starting on our work plan, we have already made impressive impact at the recent Europeana annual conference. Climate action was given front stage (EuropeanaEU, 2022) in the two-days of sessions and workshops including a passionate panel discussion on the first day that was devoted to environmental impact emphasized the importance of climate action in creating the data space for the future, the keynote presentation by Caitlin Southwick *Heritage for Future*, Evangelia Paschalidou's insightful research, *Environmental sustainability of Digital Preservation of Cultural Heritage: is Eco-sufficiency answering the pressing question?* and the Community session *How cultural institutions tell the story of climate change* with the Communicators Community all strengthened the call to action. Matias Katajavaara, from Khora.com introduced an inspiring underwater state-of-the-art rendered 3D VR that brought into sharp focus how microplastic pollution impacts the seahorse environment. Collectively the Climate Action Community steering group's contributions put climate action firmly on the agenda for Europeana 2022 and so much more.

## 5. What can you do for your planet?

The call to action is getting louder all the time. We are often reminded of the seven Rs of the circular economy – rethink, reduce, repair, reuse, refurbish, recycle, and recover – as terms of reference that were re-iterated in a recently European report, *Stormy times. Nature and humans: cultural courage for change* (European Commission, Directorate-General for Education, Youth, Sport and Culture, 2022). This publication includes 11 messages from Europe, including the emphatic message that the realization that *harnessing the cultural dimension of sustainable development is also increasingly well understood by governments* (p. 12). This gives cause for optimism as does the idea that included in the six key areas of the sustainability transition with a cultural dimension, global environmental commons are identified as building a new relationship with nature in the Anthropocene. We have also learned that studying cultural heritage and its history and reminding ourselves how previous generations coped with climate change can inform our understanding of our concurrent extreme climate events by marking out the tipping points for cultural heritage that are occurring today as they did in the past. We can learn from our museum collections of natural heritage about the role of small landscape elements such as verges, dykes, ditches, sunken roads, and thickets and re-learn how to mitigate the impact of climate change that we are facing today. There is much to learn.

There are many steps you can take to mitigate further damage to our planet. We all already know what these steps are. The cultural sector has an important role to play and the museum community, just as the digital health sector has its own responsibilities to take their own affirmative action. Number 6 of the 11 messages from Europe states *make the cultural carbon footprint lighter*. You can start today by taking this first step and check whether your website is hosted green? Our hope is that one day the Internet will run entirely on renewable energy. The Green Web Foundation (n.d.) believes that day should be within reach and works to develop tools to speed up the transition towards a green Internet. Meanwhile, think about climate

Hazan, S. (2023). The Foundation, The Network and the Climate Community come together to locate Climate Action in Europeana. In P. M. Homem (Ed.), *Integrated risk management in museums. Past lessons, future ways* (pp. 169-187). Porto: FLUP. <https://doi.org/10.21747/978-989-9082-15-1/inta9>

action and encourage the museum you are working in to join the efforts towards raising awareness and engage with their communities. There is a lot that needs to be doing. Join the green team in your museum, and, if there is not yet a green team – you can decide to set one up. It up to each and every one of us.

## Acknowledgments

Europeana is an initiative of the European Union, financed by the European Union’s Connecting Europe Facility and European Union Member States. The Europeana services are operated by a consortium led by the Europeana Foundation under a service contract with the European Commission. As of early 2020, the Europeana website (Europeana, n.d.) provides access to 58 million digital objects - books, music, artworks and more - with sophisticated search and filter tools, and many themed collections, exhibitions, galleries, and blogs.

## References

Ardalan, S., & Ehlert, P. (2022, May 9). *Researching our carbon footprint - findings and tips from Europeana Foundation*. <https://pro.europeana.eu/post/researching-our-carbon-footprint-findings-and-tips-from-the-europeana-foundation>

Casciato, M., Fox, G., & Rochester, K. (n.d.). Principles and Curriculum. *Bauhaus: Building the New Artist*. The Getty Research Institute. [https://www.getty.edu/research/exhibitions\\_events/exhibitions/bauhaus/new\\_artist/history/principles\\_curriculum/](https://www.getty.edu/research/exhibitions_events/exhibitions/bauhaus/new_artist/history/principles_curriculum/)

Chevance, G., Hekler, E. B., Efoui-Hess, M., Godino, J., Golaszewski, N., Gualtieri, L., Krause, A., Marraud, L., Nebeker, C., Perski, O., Simons, D., Taylor, J. C., & Bernard, P.



Hazan, S. (2023). The Foundation, The Network and the Climate Community come together to locate Climate Action in Europeana. In P. M. Homem (Ed.), *Integrated risk management in museums. Past lessons, future ways* (pp. 169-187). Porto: FLUP. <https://doi.org/10.21747/978-989-9082-15-1/inta9>

(2020). Digital health at the age of the Anthropocene. *The Lancet Digital Health*, 2(6), E290-E291. [https://doi.org/https://doi.org/10.1016/S2589-7500\(20\)30130-8](https://doi.org/https://doi.org/10.1016/S2589-7500(20)30130-8)

EPA (2020, July 21). *Greenhouse gas equivalencies calculator*. United States Environmental Protection Agency. <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results>

European Commission, Directorate-General for Education, Youth, Sport and Culture. (2022). *Stormy times – Nature and humans – Cultural courage for change – 11 messages for and from Europe*. Publications Office of the European Union. <https://data.europa.eu/doi/10.2766/90729>

European Union. (n.d.). *New Bauhaus Initiative*. [https://new-european-bauhaus.europa.eu/index\\_en](https://new-european-bauhaus.europa.eu/index_en)

Europeana. (2021, November 11). *The Europeana climate action manifesto*. <https://pro.europeana.eu/post/the-europeana-climate-action-manifesto>

Europeana. (n.d.). *Discover Europe's digital cultural heritage. Search, save and share art, books, films and music from thousands of cultural institutions*. <https://www.europeana.eu/en>

EuropeanaEU. (2022, September 28-30). *Europeana 2022 - How cultural institutions tell the story of climate change* [Video]. YouTube. [https://www.youtube.com/watch?app=desktop&v=1e\\_slqrSehc&list=UU\\_Z8vHTU2qx4\\_qBly9f\\_u0A&index=10&ab\\_channel=EuropeanaEU](https://www.youtube.com/watch?app=desktop&v=1e_slqrSehc&list=UU_Z8vHTU2qx4_qBly9f_u0A&index=10&ab_channel=EuropeanaEU)

Jarrett, N. (2019, November 21). *Europeana 2019: Building a sustainable event*. <https://pro.europeana.eu/post/europeana-2019-building-a-sustainable-event>

Sanderhoff, M., & Evans, G. (2021, July 21). *New European Bauhaus - an interview with Merete Sanderhoff*. <https://pro.europeana.eu/post/new-european-bauhaus-an-interview-with-merete-sanderhoff>

Hazan, S. (2023). The Foundation, The Network and the Climate Community come together to locate Climate Action in Europeana. In P. M. Homem (Ed.), *Integrated risk management in museums. Past lessons, future ways* (pp. 169-187). Porto: FLUP. <https://doi.org/10.21747/978-989-9082-15-1/inta9>

The Green Web Foundation (n.d.). *Does your website run on green energy?*

<https://www.thegreenwebfoundation.org>

Verwayen, H., & Evans, G. (2021, August 12). *New European Bauhaus - an interview with Harry Verwayen*. <https://pro.europeana.eu/post/new-european-bauhaus-an-interview-with-harry-verwayen>

## Notes on the author

In her emerita role of Senior Curator of New Media and Head of the Internet Office at The Israel Museum, Jerusalem, Susan Hazan's responsibilities include: identifying, and implementing digital solutions for the gallery, online and mobile platforms and outreach programs. Her Masters and PhD at Goldsmiths College, (2004) University of London in Media and Communications, focused on electronic architecture in the contemporary museum. Hazan has been recognized for her numerous publications on new media in education, art, museums and cultural heritage, and is currently investigating social networks, innovative platforms for disseminating virtual museums, and digital libraries in the context of cultural heritage.

Researcher, curator, evaluator, lecturer.

Chair, Europeana Network Association, (2021-22).

Europeana Advisory Board member (Current).

Chair, Europeana Climate Action Community.