

DOING

2026

IT

WITH

OTHERS:

A FIELD REPORT FROM OUR
STRUGGLE TO ECOLOGIZE
ART INSTITUTIONS



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This publication differs from the many excellent climate and sustainability guides, reports, FAQs and textbooks for art and cultural institutions currently available.¹ If you haven't already, we highly recommend reading at least some of them, as they contain valuable information, data and, perhaps most importantly, solutions that can and should be implemented by everyone, from individual artists, cultural workers and academics to large entities such as national museums and universities. What we offer here is something else: a field report from our collective struggle to implement some of these brilliant propositions for how to transform arts and culture in the face of the planetary climate and environmental crisis. Rather than analysing what's wrong with institutions and listing ideas for how to fix them, we simply share the stories of how we have attempted to do so – where we have succeeded, and where we have failed.

Doing It with Others stems from a three-year process of collective learning within the L'Internationale confederation. As part of the 'Museum of the Commons' project, we ran a programme of internal seminars and workshops for cultural workers from museums, arts organizations and universities to better understand how we can practically work on the sustainability of institutional, artistic and cultural practices and processes. The seminars, led by Henry McGhie (Curating Tomorrow²), provided a broad overview of how the arts and culture sector can strive to ecologize itself and foster climate justice as well as the ecological transformation of our politics, societies and ways of life. The workshops, hosted by Caitlin Southwick (Ki Culture³), Kim Kraczon (Ki Culture), Joanna Murzyn (Digital Ecology Institute), Ribka Tanzil

¹ For example: Ki Culture, *Energy Ki Book, Vol.I*, Amsterdam: Ki Culture, 2021; Ki Culture, *Waste & Materials Ki Book, Vol.I*, Amsterdam: Ki Culture, 2021; Ki Culture, *Social Sustainability Ki Book, Vol.I*, Amsterdam: Ki Culture, 2021; 'Toolkit on Environmental Sustainability in the Museum Practice', CIMAM, 2021, <https://cimam.org/sustainability-and-ecology-museum-practice/https://cimam.org/sustainability-and-ecology-museum-practice/cimams-toolkit-on-environmental-sustainability/>; Henry McGhie (ed.), *Mobilising Museums for Climate Action: Tools, frameworks and opportunities to accelerate climate action in and with museums*, London: Museums for Climate Action, 2021; Rodney Harrison and Colin Sterling (ed.), *Reimagining Museums for Climate Action*, London: Museums for Climate Action, 2021; 'Best Practice Guidelines', Gallery Climate Coalition, <https://galleryclimatecoalition.org/guidelines/>.

² <https://curatingtomorrow.co.uk/>.

³ <https://www.kiculture.org/>.

(Co2Action) and Monica Guillen-Royo and Borgar Aamaas (FLYWELL⁴), focused on practical, often small- and mid-scale solutions and changes that art institutions, organizations and universities can implement in areas such as materials, transport, travel, conservation, infrastructure and the digital. After completing the seminar and workshop cycle, we went back to our institutions – museums, NGOs and universities – and tried to bring some of these learnings to life.

The stories and experiences shared in this publication highlight the potential of artistic and cultural institutions to transform, as well as their inevitable contradictions and the limits of their adaptability and agency. They show that some environmental and climate recommendations can be easily implemented and bring significant benefits, while others that sound nice in theory generate a lot of friction when tested in practice. They are also a testament to how much is already being done by those who work in arts and culture – sometimes we were surprised to find out that the key change was recognizing and understanding that what we do is already ecological, rather than implementing dramatic change. In many cases, the most impressive results are achieved when organizations and institutions are open and ready to listen to and follow the people who actually strive for a more just, beautiful and sustainable world – artists, curators, educators, cultural workers, activists and local communities.

Each of the chapters in this publication is dedicated to one case of enacting ecological change within one of the L'Internationale institutions: from small but surprisingly consequential adjustments in institutional practices to complex, long-term projects that aim to rethink how we understand the role of museums and arts organizations. Some authors decided to directly refer to specific solutions recommended by experts, describing their experiences with implementing them, and even listing pledges for the future. Others report on and analyse specific activities and programmes that they have already been working on, highlighting how these actually contribute to the ecological transformation of their institutions.

The first section focuses on materials and transport, featuring a text about a specific artistic project that challenged the long-standing shipping practices at MSU in Zagreb, an account of how M HKA in Antwerp is ecologizing its approach to materials in exhibition-making,

and a detailed report on how the use of virtual couriers contributes to cutting down emissions at the Museo Reina Sofía in Madrid. The second section is dedicated to digital ecology, zooming in on how the new L'Internationale Online platform was designed with ecological principles in mind. The third section consists of two chapters on social sustainability, with a description of how MACBA in Barcelona shares the energy it produces with local urban energy communities, and a report on how the whole confederation both succeeded and failed in organizing a strike to support the climate activist movement. The fourth section focuses on the curatorial, with case studies of projects from Salt in Istanbul and M HKA in Antwerp that show how following ideas and principles pursued by curators, artists and designers can bring ecological change to life. We close the publication with a critical reflection on the contradictions of EU-funded cultural cooperation projects, looking at how changing indicators and evaluation systems can incentivize a more sustainable approach.

We hope you will find at least some of what we share insightful and useful in your own work of transforming artistic and cultural institutions. The key takeaway here is that whether you are a museum director, exhibition producer, junior curator, or an independent artist, you have the power to change things – but you have to do it with others.

4 <https://cicero.oslo.no/en/projects/flywell-how-to-reduce-air-travel-and-at-the-same-time-maintain-a-high-quality-of-life>.

INTRODUCTION

Fine art transport, or the movement of artworks between institutions, lenders and exhibition sites, has traditionally been governed by principles of risk minimization and environmental control. Curators, registrars, conservators and art handlers have relied on custom-built crates, single-use plastics, fossil fuel-derived cushioning foams, and rapid climate-controlled transport to ensure the physical safety of artworks. While these measures have been highly effective in preventing damage, they have also produced significant environmental burdens: high embodied carbon in materials, landfill-bound packing waste, air freight emissions and toxic production chains.

As cultural institutions increasingly acknowledge their environmental responsibilities, these established methods are being reassessed. Sustainability is no longer viewed as peripheral to collections care but as integral to professional ethics and institutional credibility. Organizations such as the Gallery Climate Coalition (GCC) and Ki Culture have encouraged institutions to measure carbon emissions, reduce air freight and adopt circular economy principles. In parallel, museum codes of ethics promoted by the International Council of Museums (ICOM) increasingly frame environmental responsibility as an essential component of sustainable development and the long-term protection of both natural and cultural heritage. Within this evolving landscape, the recommendations of Kim Kraczon, a conservator specializing in sustainable practices in the art sector, provide a particularly practical framework for rethinking art transport. Rather than focusing solely on substituting materials, Kraczon emphasizes systemic changes in planning, procurement, reuse and evaluation. This chapter examines materials and methods in fine art transport through her recommendations, situating them alongside broader field guidance, and concludes with a case study of *By the Means at Hand* by Vlatka Horvat, presented at the 60th Venice Biennale in 2024 and later donated by the artist to the Museum of Contemporary Art in Zagreb (MSU).

To understand the significance of Kraczon's proposals, it is first necessary to examine the conventional materials and systems that currently dominate fine art transport. Standard practice typically involves custom plywood crates, polyethylene and polyurethane foams, Tyvek sheeting, bubble wrap, stretch film, silica gel and bespoke internal supports designed to immobilize objects. These materials are frequently fabricated specifically for a single exhibition, particularly in the context of international loans where lenders require individualized packing solutions. Tight schedules often lead to the use of air freight, further increasing carbon emissions.

Although these practices effectively minimize risk to artworks, they generate significant environmental costs. Virgin plywood and plastics carry high embodied carbon, composite packing systems are difficult to recycle, and synthetic foams can release volatile compounds. Even when crates are reusable, internal packing components are often discarded due to contamination concerns or dimensional specificity. In response to these challenges, sector initiatives such as the GCC and Ki Culture have begun advocating for slower shipping methods, consolidated transport and circular resource management.⁵ Building on these broader principles, Kim Kraczon translates sustainability goals into concrete procedural recommendations for everyday museum practice.

REFRAMING ART TRANSPORT: KIM KRACZON'S PROCEDURAL RECOMMENDATIONS⁶

- Kraczon's framework begins at the earliest stage of exhibition development, arguing that sustainability must be embedded in planning rather than retrofitted during packing. She maintains that institutions should allocate sufficient time in the preparatory phase to plan exhibitions, events and transport logistics resourcefully and efficiently. When planning horizons are extended, registrars can coordinate consolidated shipments, avoid most air freight, and design adaptable display systems that reduce the need for repeated

5 Recommendations from the Gallery Climate Coalition and Ki Culture can be found via their official websites: <https://galleryclimatecoalition.org/> and <https://www.kiculture.org/>.

6 Kim Kraczon's lecture on fine art transport and recommendations related to it were part of a series of online webinars held during 2024 as part of the education in sustainability for cultural workers that collaborate within L'Internationale's Museum of the Commons Climate Assembly.

fabrication. For example, confirming lender agreements well in advance may allow multiple works from the same region to travel together via ground transport, thereby lowering both emissions and costs. In this way, rethinking and redesigning the planning process becomes a foundational environmental strategy.

- From this emphasis on planning ahead follows a second principle: before purchasing new materials, institutions should systematically question whether new purchases are necessary at all. Kraczon proposes that staff formally review whether required materials already exist within the institution, whether they might be borrowed from another organization, or whether they can be substituted with adaptable components already in storage. A registrar preparing to ship a painting might, for instance, consult a regional partner about reusing a compatible crate rather than commissioning a new one. Alternatively, adjustable foam inserts could be reconfigured within an existing crate. By institutionalizing such questioning, museums reduce reliance on scarce resources and cultivate a culture of material accountability.
- Extending the logic beyond individual decision-making, Kraczon recommends building structured networks for material sharing. Establishing local group chats, mailing lists or shared databases among museums, galleries and other institutions and organizations enables the systematic exchange of crates, travel frames, archival boxes and surplus packing materials that have been properly stored. When one exhibition concludes, materials can be circulated to others before dismantling or disposal. This collaborative infrastructure transforms isolated institutions into participants in a regional circular economy and operationalizes the cooperative ideals promoted by organizations such as the GCC.
- Complementing these informal networks, Kraczon also encourages engagement with online material-sharing platforms active within specific regions. Through such platforms, institutions can list surplus materials, such as honeycomb cardboard sheets or reusable padded blankets, making them available to others rather than sending

them to landfill. By expanding the scope of exchange beyond immediate colleagues, digital platforms enhance the scalability of reuse strategies and integrate museums into broader sustainability ecosystems.

- While reuse and sharing address procurement, Kraczon's recommendations also intervene at the point of disposal. She argues that before discarding used or damaged materials, staff should be required to consult local repair and repurposing services. A crate with superficial structural damage may require only minor reinforcement to regain functionality, and foam inserts can often be reshaped into corner supports or vibration buffers. Instituting a mandatory repair assessment aligns museum practice with waste hierarchy principles and reinforces the value of durability over convenience.
- In parallel with extending material lifecycles, Kraczon calls for a deliberate shift away from single-use plastics. She advocates replacing stretch film and disposable cushioning with reusable systems, non-fossil-derived materials or easily recyclable alternatives. Importantly, compostable materials should only be adopted when appropriate composting infrastructure exists; otherwise, they risk generating unintended environmental harm. For example, substituting reusable Velcro straps and padded blankets for plastic wrap can significantly reduce waste without compromising object security. Such substitutions require careful evaluation of conservation standards, but they demonstrate that environmental responsibility and object safety can coexist.
- Beyond specific substitutions, Kraczon underscores the importance of designing systems that keep materials in use for as long as possible. This may involve tracking the number of times a crate is deployed, designing crates with replaceable panels, and maintaining safe and adequate storage spaces or internal repair workshops. Rather than viewing crates as single-project expenditures, institutions can reconceive them as long-term assets whose lifespan is actively managed.
- Material sourcing also becomes a site of ethical consideration. Kraczon recommends prioritizing reclaimed or

recycled-content materials and purchasing from local manufacturers whenever feasible. Commissioning crates from a local or regional workshop using certified reclaimed timber, for example, reduces transport emissions and supports local economies. However, such sourcing must still satisfy conservation standards, ensuring that environmental improvements do not introduce preservation risks.

- Finally, Kraczon broadens the evaluative framework for procurement by insisting that environmental impact assessments encompass not only carbon emissions but also toxicity, disposal management and social implications. When selecting different materials, a registrar might compare products based on production emissions, worker safety conditions, recyclability and landfill persistence. By adopting this holistic perspective, institutions extend their responsibility beyond collections to encompass environmental and social systems.

CASE STUDY: BY THE MEANS AT HAND

The relevance of these principles becomes particularly visible when examining artistic projects that experiment with alternative logistical systems. A compelling example of sustainable thinking within contemporary art practice is *By the Means at Hand* by Vlatka Horvat, presented in the Croatian Pavilion at the 60th Venice Biennale in 2024. The project brought together more than 200 international artists living ‘as foreigners’ through a performative system of exchange between Horvat and the invited artists, which activated informal networks of friends, colleagues and travellers who carried artworks in their personal luggage while already journeying between cities. By relying on journeys that would occur regardless of the exhibition, the work reduced the need for additional packing materials, custom crates and air shipments, entirely circumventing the machinery of logistics and transport companies. The pavilion space functioned as both exhibition site and studio: Horvat lived and worked there for the duration of the Biennale, producing collages in response to her stay in Venice, which she then sent to the participating artists around the world using the same informal courier network, further emphasizing reciprocity and cyclical movement.

By the Means at Hand also points to a wide range of broader themes such as alternative logistics, the spontaneous production of social relations, informal and gift economies, and the idea of trustfulness. On a subtler, yet crucial, infrastructural level, the project takes off from a recognition of the state of emergency when it comes to the climate crisis, and the substantial environmental footprint of institutionalized modes of production, transportation and presentation of contemporary art.⁷

The project suggests that the future of sustainable exhibition-making lies in reimagining how artworks travel, how institutions collaborate, and how scale and value are defined. In doing so, Horvat reframes sustainability not as constraint, but as a generative artistic methodology. With the donation of the exhibition to the Museum of Contemporary Art (MSU) in Zagreb, these principles are now being rethought within an institutional practice. The relatively short distance between Venice and Zagreb enabled low-carbon ground transport options for the artworks and the project archive, while the modular installation elements, built by the Venice-based collective Rebiennale/R3B: Reuse, Recycle, Rebuild, were donated to a local organization. In this context, the project functions not only as an artwork but also as a model for rethinking the logistical and material assumptions of exhibition-making within institutional practice.

INSTITUTIONAL COMMITMENTS FOR THE MUSEUM OF CONTEMPORARY ART IN ZAGREB

The acquisition of *By the Means at Hand* by the MSU Zagreb provides an opportunity to consider how similar sustainability principles might be integrated into institutional practice. An examination of MSU Zagreb’s current practices indicates that several of the recommendations articulated in Kraczon’s framework have already been incorporated into the museum’s operational procedures. Shared ground transport for artworks originating from the same region is frequently coordinated when organizing exhibition loans, while existing packing materials are retained and systematically repurposed for future use. The museum also prioritizes locally sourced materials and, where feasible,

7 From the press release for Vlatka Horvat, *By the Means at Hand*, 2024: <https://www.vlatka-horvat.com/portfolios/by-the-means-at-hand/>.

extends the lifespan of existing components through restoration and reconstruction rather than replacement. However, these measures remain situational rather than institutionalized. To align more fully with a comprehensive sustainability strategy, such practices would need to be formalized and embedded as standard procedure within the planning and organization of art transport, forming part of a broader, long-term environmental commitment.

Building on both Kraczon's procedural framework and precedents such as *By the Means at Hand*, MSU Zagreb is well positioned to reconceptualize its approach to art transport. The museum plans to establish and implement a sustainable transport protocol grounded in early-stage logistical planning, documented reuse assessments and systematic environmental impact evaluations for all major shipments. This approach would be reinforced by standardizing modular, reusable crate systems; minimizing reliance on single-use plastics in packing processes; prioritizing reclaimed and locally sourced materials; and formalizing partnerships with regional institutions to consolidate shipments and share resources. Complementing these operational reforms, the publication of annual sustainability metrics related to art transport would further institutionalize transparency and strengthen accountability.

CONCLUSION

The evolution of materials and methods in fine art transport reflects a broader shift in museum ethics, from a narrow focus on object preservation to a more expansive understanding of institutional responsibility. Conventional practices, while effective in protecting artworks, carry environmental costs that can no longer be overlooked. The procedural recommendations of Kim Kraczon offer a structured pathway for embedding sustainability into daily operations, complementing sector initiatives from organizations such as the Gallery Climate Coalition and Ki Culture.

At the same time, projects such as *By the Means at Hand* by Vlatka Horvat demonstrate that sustainable thinking can shape not only transport logistics but artistic production itself. As MSU Zagreb continues to develop its transport strategies, it has the opportunity to redefine art logistics as a practice grounded in foresight, collaboration and ecological responsibility. In doing so, safeguarding cultural heritage and safeguarding environmental systems become mutually reinforcing commitments.

MATERIALS AND PRODUCTION IN EXHIBITION-MAKING

ARGYRI PLATSA

INTRODUCTION

This chapter shares a small sample of the efforts to improve sustainability in exhibition-making within the presentations department of the Museum of Contemporary Art Antwerp (M HKA). The department's core task is the realization of the museum's temporary exhibitions using dedicated scenography produced in-house. The team consists of project managers, technicians, a production coordinator, curators and the associate director.

The goal of this chapter is to share our trajectory and its different phases with peers in the sector, and to make clear that it is an ongoing process for which time and effort are required and where progress is not linear. In other words, the discussion should be approached as a glimpse into the reality of our museum as it looks to replace materials that are frequently used to build and install temporary exhibitions with more sustainable alternatives, despite not having an established sustainability policy. Finally, the chapter also briefly touches upon the importance of human factors and the difference that teams can make in such efforts.

DRY WALLS

Dry walls remain an integral part of scenography for temporary exhibitions in the museum. They have been a go-to solution for group shows as space dividers, as made-to-measure rooms for projections and as a way to create additional hanging space and unique exhibition routes. The materials used to construct them include metal studs, dry wall panels and paint. The lifespan of these temporary structures is sometimes extended when they can be incorporated in subsequent exhibitions. Once they need to be demolished, the panels are disposed of and only the metal studs can be reused for similar constructions in the future.

Reducing the use of dry wall panels is an ongoing task for our department. Among the practices of other local museums that we have considered is the use of wooden panels that can be repainted and sanded. However, a closer assessment by our technical team has concluded

that the much greater area of panelling required by M HKA most of the time, as well as the limited time between exhibitions, means that this alternative could be adopted only for smaller scale constructions.

Another idea currently being explored is the introduction of reusable wall systems. The Kunstmuseum Wolfsburg has developed such a system, which is highly customizable and available for purchase. Yet, after researching other similar systems, it has become clear that our museum does not have the storage space on site to accommodate these structures when not in use. The in-house technical team is considering whether it would be feasible to develop a made-to-measure solution that could be flat-packed and stored in the museum. This research project is ongoing and does not have a specific deadline.

FABRICS

Parallel to the research on reusable wall structures, the past few years of practical experimentation with other materials to define the layout and scenography of exhibitions has yielded interesting data and feedback. For instance, for the exhibition 'Lenin Was a Mushroom: Moving Images in the 1990s', presented between 3 June and 21 August 2022 at M HKA, the curator proposed introducing wool curtains instead of dry walls as the central element of the show's scenography for the following reasons: efficient light and sound management among the various installations and video works; a quicker installation time; the possibility of reusing the fabric; and as a softer way to divide exhibition spaces.

Indeed, after the exhibition, and with minimal adaptations, the curtains were repurposed for Céline Gillain's project 'ANTENA. Listening to the walls' (19 February 2023 to 18 February 2024), not only to improve the acoustic and sound-absorbing properties of the space but to define its aesthetics for the duration of this year-long public programme. A third life was given to the wool curtains following this project, with some used for subsequent museum projects as space dividers or curtain entrances for dark rooms, and others donated to a local art collective for their own presentations.

Through this experience, it became clear that wool curtains were versatile and easily adjustable for different projects, and so could be reused more than our usual materials. Additionally, the curtains did not create any waste requiring disposal after the exhibition, as is the case with dry walls. They were also much more storage-friendly due to the limited volume they occupied. Rolling the curtains resolved concerns around creasing and the need to maintain them in good condition,

while the initial choice of a neutral colour also played an important role in their reusability. Due to this very positive experience and in light of requests to bring them back for more projects, a conversation should now take place among curators, project managers and the technical team to determine whether they might become a permanent element of our exhibition scenography to help reduce the reliance on dry walls.

SHOWCASES

Other regular features of M HKA's exhibitions are showcases and seating. These are mostly constructed in-house but vary in dimensions, style and material. A collection of different kinds of showcases and seating has been formed and is currently stored at an external depot. A colleague from the department manages and reviews the stock regularly. Items that have not been used for a while are advertised and donated to our network of local artists, other museums, fine arts academies and companies operating on circular economy principles.

Our museum also lends its stock to other museums to boost sustainability efforts. Most of these loans are short-term and last as long as a single exhibition run. However, a recent long-term loan request came in 2024 from the Bijenteeltmuseum (Beekeeping Museum) in Kalmthout, who asked for a variety of materials that could be used as presentation material for a new exhibition to last three years. The technical team took time to review all materials and, following this process, agreed to loan multiple platforms, showcases and empty crates in return for a symbolic fee covering the removal expense charged by the external depot.

To further increase our sustainability and at the same time reduce storage, transport and the construction of new elements, our project managers and technicians have proposed the introduction of a standard style for showcases and seating to be used in all M HKA exhibitions. In this way, a consistent visual identity could be established and only in exceptional cases would new showcases or furniture need to be produced. Currently, it seems that not everyone is enthusiastic about this idea, since the possibility of customizing these elements for particular exhibitions will be much more limited. The conversation has been on hold in the last months, but will be brought up again at our next departmental meeting.

WINDOW STICKERS

Planned interventions in the gallery spaces initiated by the technical team will also soon abolish materials that are frequently purchased

and installed for temporary exhibitions, in favour of a long-term solution. Covering window surfaces with temporary sticker foils has been a way to manage light and colour effects for almost every exhibition in some of the museum's gallery spaces. Asking suppliers and a variety of companies for alternatives to traditional blinds, a proposal emerged to apply a PET film with dispersed liquid crystals to change the transparency of windows to that of etched glass. This widely used solution for hospitals seems to fit our needs as it has a long lifespan, low energy consumption and is up to the aesthetic standards and flexibility requested by the curatorial team. While it took around a year to reach a consensus within the team to go ahead with this out-of-the-box solution, the PET film was installed in January 2026 and the department's intention is to further expand this system to more window surfaces in the museum's galleries.

HUMAN FACTORS: NETWORKING

Our project managers and technical team have been the driving force in all the above-mentioned practices and interventions; they share a commitment to the principles of sustainability and are eager to find solutions that make exhibition-making more efficient and less costly at the same time. They dedicate much time to the sourcing of second-hand materials and display items on local websites. Another initiative that has emerged recently is for the team to reach out to commercial collaborators to ask for loans of materials and objects (such as cables and display tables) for exhibitions, to be returned in their original state after the exhibition ends. Of course, this is subject to the time limitations of individual projects, and final decisions currently lie with curators and artists.

The department is also very keen to connect with other colleagues in the field who are interested in sustainable exhibition-making. M HKA's project managers participated in the kick-off meeting that FARO (a support centre for the cultural heritage sector in Flanders) organized recently about sustainability in exhibition-making. This meeting was an opportunity for the team to expand their network and plan follow-up meetings to exchange practical information and tips, and to work closely together.

CONCLUSIONS/COMMITMENTS FOR M HKA

All in all, the above-mentioned steps towards more sustainable resource management in exhibition-making at M HKA are a collaborative effort

among colleagues and not the result of a top-down approach. Such initiatives stem from long discussions aimed at switching to more sustainable practices that might have parallel benefits at the practical, economic and aesthetic levels of the exhibition-making process. These factors are also decisive in the attempt to bring all team members on board to change established practices. The time and effort that such processes occupy is considerable and not to be underestimated. However, open discussions bring more ideas to the table and eventually enhance the support of new practices by all team members.

The commitment to work further and in a more systematic manner on the topics elaborated above is the next step for this ongoing trajectory at M HKA. A one-pager containing agreed guidelines on the use of materials for our exhibitions might work as both an internal checklist and as a working document for establishing collaborations with externals (designers, welders, supply companies). In this way, sustainable exhibition-making might become less fragmented and more systematically embedded in our practice. Another commitment is to grow our circle of influence first within our organization, by setting up regular meetings with colleagues from other departments (such as facilities) to establish collaboration on cross-departmental projects. Finally, we will further prioritize keeping up with developments in the field and continue our active participation in working groups about sustainable exhibition-making.

THE USE OF VIRTUAL COURIERS FOR ARTWORK LOANS AS A TOOL FOR MINIMIZING THE ENVIRONMENTAL IMPACT OF EXHIBITION-MAKING

NATALIA GUAZA

MARIA MALLOL

CAMINO PRIETO CADENAS

INTRODUCTION

Before beginning our text, we would like to acknowledge the contradiction that is intrinsic to temporary exhibitions when it comes to sustainability. To paraphrase the Spanish art historian Pablo Martínez, the entire exhibition-making system has a fossil condition, not only because of the huge carbon footprint of travelling artworks and cultural tourism, but also because the museum institution is closely linked to the institutional and commercial networks built in parallel to industrial modernity and colonial empires, concentrating populations and capital in large metropolises and dependent upon the extraction and consumption of fossil fuel energies for their existence: first coal, later gas and oil.⁸

Thus, while acknowledging the contradictory nature of our activities, we also recognize that temporary exhibitions and travelling shows play an important role in the dissemination of contemporary art and culture.

There is a growing body of specialized literature dedicated to sustainability in exhibition-making, offering practical guidance on how to reduce the carbon footprint of exhibitions and cultural institutions. Key titles include *Carbon Footprinting in Cultural Institutions*, produced by Kulturstiftung des Bundes (2021); Ki Culture's *Energy Ki Book, Vol.I* (2021); and the Gallery Climate Coalition's *Decarbonisation Action Plan* (2021).⁹ In addition, CIMAM provides a library of resources specifically focused on carbon footprint calculation in the

8 Pablo Martínez, 'Museo', in Pablo Martínez, Emilio Santiago and Jaime Vindel (ed.), *Atlas cultural de la energía*, Madrid: Catarata, 2025, pp. 188–203.

9 Sebastian Brünger, Tinatin Eppmann and Kathrin Mergel, *Carbon Footprinting in Cultural Institutions*, Berlin: Kulturstiftung des Bundes, 2021; Ki Culture, *Energy Ki Book, Vol.I*, Amsterdam: Ki Culture, 2021; Danny Chivers, Aoife Fannin and Heath Lowndes, *Decarbonisation Action Plan*, London: Gallery Climate Coalition, 2021.

field of contemporary art institutions. These resources inform and support the ongoing work at the Museo Nacional Centro de Arte Reina Sofía (MNCARS), which is currently immersed in a broader institutional sustainability plan – including carbon footprint audits and the development of new policies – as well as the activities of the museum's internal working group on sustainability action. Within this broader framework, the following discussion focuses on a concrete example of sustainability in practice.

In exhibition-making, transport remains the principal contributor to a project's carbon footprint. While much institutional attention has focused on the energy consumption of buildings, materials and display infrastructure, the mobility of artworks – often across continents – continues to shape the environmental cost of international collaboration. Within this context, the practice of virtual couriering emerges not as a radical transformation of exhibition logistics, but as a concrete and measurable adjustment within existing systems – an adjustment that has been supported and encouraged by organizations such as CIMAM, the Bizot Group and other professional bodies within the sector.

Virtual couriering first emerged at MNCARS under very specific circumstances during the Covid-19 pandemic, when widespread international travel restrictions required institutions to reconsider established loan procedures in exhibition-making.¹⁰ What initially appeared as a pragmatic response to an exceptional situation has since been reconsidered as a targeted strategy capable of reducing emissions associated with courier travel, while maintaining the highest standards of conservation and professional oversight.

Although the carbon savings generated by replacing a single flight may appear modest in relation to the total footprint of an exhibition, the practice represents a tangible and institutionally visible measure. It operates in contrast to more symbolic sustainability gestures – such as substituting vinyl wall labels with paperboard – whose environmental impact is comparatively marginal.

Rather than presenting virtual couriering as a universal solution, this text approaches it as a viable institutional practice shaped by professional judgement, inter-institutional trust, and technological mediation,

10 Other institutions were experimenting with this practice at the same time, as explored in the case of Tate in Maria Balshaw, 'The 100-Year Future: Museums and the Climate and Nature Crisis', in Nick Merriman (ed.), *Museums and the Climate Crisis*, London: Routledge, 2021.

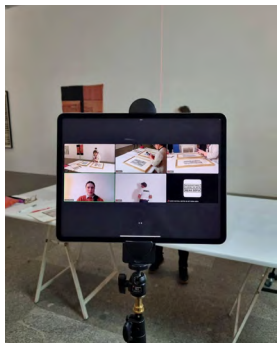
with the well-being of the artworks in transit remaining the central concern. To explore its practical implications, here we will analyse three specific case studies at MNCARS, corresponding to distinct operational contexts: a pre-pandemic exhibition, an example implemented during the pandemic, and a post-pandemic case in which virtual couriering was considered as a deliberate sustainability measure to reduce the impact of courier travel in exhibition-making.

WHAT IS A VIRTUAL COURIER?

Virtual couriering addresses a structurally significant element of exhibition-making: mobility. Traditionally, a courier from the lending institution accompanies (or does not accompany) an artwork during transport in order to oversee packing, handling, condition checks and installation at the borrower's venue.

A virtual courier, by contrast, replaces physical accompaniment with a rigorously structured protocol of remote supervision. Oversight is enacted through coordinated documentation; real-time audiovisual transmission at the borrower's venue during unpacking, condition checking and installation, under the virtual supervision of the lender; and through the collaboration of conservators at both the lending and borrowing institutions.

Central to this practice is the premise that the well-being and protection of the artwork remain the primary concerns, and that any ecological considerations must be subordinated to rigorous conservation assessment. Decisions to adopt virtual courier protocols are neither automatic nor universal: this modality is offered only when deemed appropriate by the borrower and requires the explicit consent of the lender. Each case is evaluated collaboratively by conservators, registrars, transport specialists, and exhibition coordinators from the lending institution, and the final authorization rests exclusively with them.



A virtual courier during installation.
Photo: Camino Prieto Cadenas

Virtual couriering is not simply the use of video conferencing in place of travel. It requires a carefully constructed methodological framework combining conservation expertise, technological infrastructure and coordinated documentation.

1. INSTITUTIONAL ASSESSMENT AND ALIGNMENT

The process begins with dialogue between the lender's and borrower's teams of exhibition coordinators, exhibition managers, registrars and conservators. Environmental conditions, packing specifications, vehicle requirements, installation constraints and risk mitigation strategies are reviewed and confirmed. This phase is critical for establishing mutual confidence and defining the parameters within which remote supervision can responsibly occur.

2. DOCUMENTATION AND KNOWLEDGE TRANSFER

The lender's conservator prepares a comprehensive dossier for each artwork, including:

- A condition report and alteration map, signed prior to crate closure;
- Detailed photographic documentation of all surfaces and structural elements;
- Precise handling instructions for unpacking, installation, and repacking.

This documentation is reviewed by the borrower's exhibition team.

3. PACKING AND PHYSICAL PREPARATION

Packing is supervised in situ by the lender's conservator or selected professional. Crate construction, protective materials and internal supports are specified in detail. Transport agents are instructed regarding environmental controls and the positioning of crates within vehicles.

During transport, qualified staff follow detailed protocols, recording key handling moments on video, especially at critical points such as loading and unloading in restricted airport areas, or during overnight storage. When required by the lender, the borrower – through the transport agent – may also provide a tracker that automatically notifies all stakeholders of each stage of the artwork's journey, supplying GPS coordinates and environmental monitoring data.

Upon arrival at the borrower's premises, unloading is supervised by the borrower's registrar responsible for the exhibition and/or by a conservator. Crates are placed in a clean, climate-controlled environment before opening, respecting a minimum 24-hour acclimatization period.

5. VIRTUAL SUPERVISION

During unpacking, live multi-camera transmission allows the lender's conservator to monitor each step. Condition checks are conducted against the master report.

To ensure that remote oversight maintains professional standards, MNCARS contracts a specialized audiovisual professional to produce high-quality multi-camera streaming sessions. Three simultaneous camera perspectives are typically used, including a mobile gimbal-mounted camera capable of closely following the artwork during handling. The system combines mirrorless cameras, stabilization equipment, wireless HDMI transmission (Hollyland), and multiple connected devices transmitting to platforms such as Zoom or Teams. This configuration enables lender conservators to observe the process from multiple angles and to intervene verbally in real time.¹¹

Each session is conducted by the exhibition registrar and the conservator responsible for the condition checking of the artwork, who accompany the lender virtually throughout the process, requesting authorization before proceeding to each subsequent step and reporting every action undertaken.



Technical devices used for virtual couriers, MNCARS, November 2020.
Photo: Paul Hanna

¹¹ The importance of high-quality connection is essential for registrars and conservators, as stated in Constance van Beurden-Zaal, Faye Cliné, Rosalie van Gulick and Henrietta Ward, 'Virtual Couriering: An Alternative for More Sustainable Loans?', CODART, July 2023.

If new alterations are detected, they are reported without delay and evaluated collaboratively with reference to the prior photographic records.

The objective is not to replicate physical presence, but to create a structured and technologically robust environment in which distributed supervision can operate with precision.

6. DEINSTALLATION

At the conclusion of the exhibition, the same virtual supervision protocol is applied to repacking and loading, ensuring consistency across the entire loan cycle.

CASE STUDIES

Initial waiver: To calculate the carbon footprint, we have used the UNFCCC Secretariat Greenhouse Gas Calculator and the International Civil Aviation Organization (ICAO) to determine the kilograms of CO₂e of air transportation. We are aware that our case studies differ in nature and the number of works, since it is very difficult to find exhibitions with the exact same origin and number of couriers. Our intention is to provide some guidance through the amount of CO₂ tonnes of each movement and to reflect on how experiences during the Covid-19 pandemic have influenced the planification of couriers and the transport of loaned artworks in the exhibitions department of MNCARS.

1

The exhibition 'Lost, Loose and Loved: Foreign Artists in Paris 1944–1968' was presented at MNCARS in 2019 under the curatorship of Serge Guilbaut, presenting works by artists of diverse origin who were established in Paris after World War II. Like the artists, the works presented in the exhibition came from diverse locations around the world to gather in Madrid during the five months of the show. Some of them travelled accompanied by a courier, a conservator who looked after the artworks during their journey, loading, and installation in the galleries. Specifically, in this show there were eleven couriers: four coming from the US East Coast, five from Paris, and two local lenders, one travelling by train from Barcelona and the other from Madrid.

The total CO₂ tonnes for these journeys was 15.28 for each way, with a total of 30.56 tonnes for both collection and dispersal of artworks during the exhibition. Transportation by air is accountable for 25.74 CO₂ tonnes (including one cargo plane). Transportation by cargo truck amounts to 3.86 CO₂ tonnes, while rail transportation reaches

roughly 0.07 CO₂ tonnes. The emissions corresponding to the accommodation of the couriers are 0.88 CO₂ tonnes. In this case, it is interesting to acknowledge, to nobody’s surprise, the reduced carbon footprint when travelling by high-speed train.

DEPARTURE	ARRIVAL	CLASS	TRAVEL	KG CO ₂ E
Toronto (YYZ)	Ottawa (YOW)	Economy	Return	110.00
Toronto (YYZ)	Madrid (MAD)	Business	Return	2,486.00
Houston (IAH)	Paris (CDG)	Business	Return	4,078.00
New York (JFK)	Madrid (MAD)	Business	Single way	1,420.00
Madrid (MAD)	Washington, DC (IAD)	Business	Single way	1,873.00
New York (JFK)	Madrid (MAD)	Business	Single way	1,420.00
Madrid (MAD)	Washington, DC (IAD)	Business	Single way	1,873.00
Paris (CDG)	Madrid (MAD)	Economy	Return	226.00
Paris (CDG)	Madrid (MAD)	Economy	Return	226.00
Paris (CDG)	Madrid (MAD)	Economy	Return	226.00
Madrid (MAD)	Paris (CDG)	Economy	Single way	113.00
Toronto (YYZ)	Madrid (MAD)	Business	Return	2,486.00
Houston (IAH)	Madrid (MAD)	Cargo	Single way	466.00
Luxembourg (LUX)	Houston (IAH)	Business	Single way	2,116.00
Washington, DC (IAD)	London (LHR)	Business	Single way	299.00
London (LHR)	Madrid (MAD)	Business	Single way	477.00
Madrid (MAD)	Washington, DC (IAD)	Business	Single way	1,873.00
New York (JFK)	Madrid (MAD)	Business	Single way	1,420.00
Madrid (MAD)	Philadelphia (PHL)	Business	Single way	1,532.00
Paris (CDG)	Madrid (MAD)	Economy	Return	226.00
Paris (CDG)	Madrid (MAD)	Economy	Single way	113.00
Paris (CDG)	Madrid (MAD)	Economy	Return	226.00

Paris (CDG)	Madrid (MAD)	Economy	Return	226.00
Paris (CDG)	Madrid (MAD)	Economy	Return	226.00
Barcelona Sants	Madrid Atocha	National Rail	Return	72.12
Cargo truck	From: Paris–Madrid, Madrid–Luxembourg, Baltimore–New York, New York–Washington, DC			3,865.00
ACCOMMODATION				
COUNTRY	N OCCUPIED ROOMS	N NIGHTS	FACTORS	KG CO ₂ E
Spain	22	2	20.27	883.24

2

The first temporary exhibition to open at MNCARS during the Covid-19 pandemic was ‘Mondrian and De Stijl’ (November 2020 to March 2021), curated by Hans Janssen and organized with the Stichting Kunstmuseum in The Hague. Pandemic regulations were irregular and followed different levels of compliance in each country, adding to an already stressed schedule of temporary exhibitions, with museums all over the world rescheduling or cancelling shows and/or artwork loans. Within this situation, the organizing institutions decided to proceed with the show. Despite some loans being cancelled or dismissed, the most remarkable fact of the organization of this exhibition was that it marked the beginning of a virtual courier protocol developed by the exhibitions department with a high level of quality and guarantees.

Finally, there was only one courier for this exhibition, travelling from the Netherlands, and their total emissions were 0.59 CO₂ tonnes: 0.51 corresponding to the flight and 0.08 for hotel accommodation.

Because of the exceptional circumstances, a significant number of lenders accepted the virtual courier tool that was offered by the MNCARS exhibition team. If we calculate the CO₂ emissions of the couriers assigned to this exhibition with reference to the pre-pandemic plan, the figure changes dramatically. A total of 23.29 CO₂ tonnes would have been emitted, corresponding to the travel of a further six couriers – two from the us East Coast, one from the central us, and three from Europe – in addition to the courier coming from Amsterdam. This calculation shows that only 3 percent of the total CO₂ tonnes estimated for couriers was finally emitted, signalling the significant reduction facilitated by the use of a high-quality virtual courier.

DEPARTURE	ARRIVAL	CLASS	TRAVEL MODE	KG CO ₂ E
Amsterdam (AMS)	Madrid (MAD)	Economy	Return	254.00
Amsterdam (AMS)	Madrid (MAD)	Economy	Return	254.00
NL	NL	National Rail	Return	3.55
ACCOMMODATION				
COUNTRY	N OCCUPIED ROOMS	N NIGHTS	FACTORS	KG CO ₂ E
Spain	2	2	20.27	80.30

INITIALLY PLANNED COURIERS, REPLACED BY VIRTUAL COURIER

DEPARTURE	ARRIVAL	CLASS	TRAVEL MODE	KG CO ₂ E
Amsterdam (AMS)	Madrid (MAD)	Economy	Return	254.00
Basel (BSL)	Madrid (MAD)	Economy	Return	232.00
Cleveland (CLE)	New York (JFK)	Business	Return	378.00
New York (JFK)	Madrid (MAD)	Business	Return	2,840.00
Baltimore (BWI)	London (LHR)	Business	Return	2,602.00
London (LHR)	Madrid (MAD)	Business	Return	954.00
Stockholm (ARN)	Madrid (MAD)	Economy	Return	422.00
Minneapolis (MSP)	Paris (CDG)	Business	Return	3,494.00
Paris (CDG)	Madrid (MAD)	Economy	Return	226.00
Amsterdam (AMS)	Madrid (MAD)	Economy	Return	254.00
Basel (BSL)	Madrid (MAD)	Economy	Return	232.00
Cleveland (CLE)	New York (JFK)	Business	Return	378.00
New York (JFK)	Madrid (MAD)	Business	Return	2,840.00
Baltimore (BWI)	London (LHR)	Business	Return	2,602.00
London (LHR)	Madrid (MAD)	Business	Return	954.00
Stockholm (ARN)	Madrid (MAD)	Economy	Return	422.00

Minneapolis (MSP)	Paris (CDG)	Business	Return	3,494.00
Paris (CDG)	Madrid (MAD)	Economy	Return	226.00
ACCOMMODATION				
COUNTRY	N OCCUPIED ROOMS	N NIGHTS	FACTORS	KG CO ₂ E
Spain	2	12	20.27	481.76



Technical devices used for virtual couriers, MNCARS, November 2020. Photo: Paul Hanna

3

In 2023, with the mobility of artworks fully restored worldwide and the travel regulations and quarantines of the Covid-19 pandemic completely adjourned, the exhibition ‘Ben Shahn: On Nonconformity’ was presented at MNCARS. Curated by Laura Katzman, this show involved an elevated number of artwork loans and an elevated number of shipments, as Shahn’s paintings are almost all in US collections. Taking this into consideration, the exhibitions department of MNCARS considered offering the virtual courier tool in all cases where the artwork conditions allowed for it, and the lenders approved this option.

A total of 40.89 CO₂ tonnes resulted from the journeys of eight couriers accompanying artworks from the USA: 39.32 corresponding to air travel, 0.93 for transport by cargo truck, and 0.64 for the couriers’ accommodation in Madrid.

DEPARTURE	ARRIVAL	CLASS	TRAVEL MODE	KG CO ₂ E
New York (JFK)	Luxembourg (LUX)	Cargo	Single way	1,880.00
Amsterdam (AMS)	Washington, DC (IAD)	Economy	Single way	330.00
Philadelphia (PHL)	Madrid (MAD)	Business	Return	3,064.00
Boston (BOS)	Madrid (MAD)	Business	Return	2,010.00
New York (JFK)	Madrid (MAD)	Economy	Return	648.00
New York (JFK)	Madrid (MAD)	Economy	Return	648.00
Chicago (ORD)	Madrid (MAD)	Business	Return	3,640.00
Chicago (ORD)	Madrid (MAD)	Business	Return	3,640.00
Dallas Fort Worth (DFW)	Madrid (MAD)	Premium Economy	Return	1,164.00
Washington, DC (IAD)	Madrid (MAD)	Economy	Single way	306.00
Madrid (MAD)	Washington, DC (IAD)	Cargo	Return	3,820.00
Philadelphia (PHL)	Madrid (MAD)	Business	Return	3,064.00
Boston (BOS)	Madrid (MAD)	Business	Return	2,010.00
New York (JFK)	Madrid (MAD)	Economy	Single way	324.00
Madrid (MAD)	New York (JFK)	Business	Single way	1,420.00
New York (JFK)	Madrid (MAD)	Economy	Return	648.00
New York (JFK)	Madrid (MAD)	Business	Return	2,840.00
Chicago (ORD)	Madrid (MAD)	Business	Return	3,640.00
Dallas Fort Worth (DFW)	Madrid (MAD)	Business	Return	4,220.00
Cargo truck	From: Paris–Madrid, Madrid–Luxembourg, Washington, DC– New York			935
ACCOMMODATION				
COUNTRY	N ROOMS	N NIGHTS	FACTORS	KG CO ₂ E
Spain	16	32	20.27	642.34

30 THE USE OF VIRTUAL COURIERS FOR ARTWORK LOANS AS A TOOL FOR MINIMIZING THE ENVIRONMENTAL IMPACT OF EXHIBITION-MAKING

The number of couriers initially planned for this show was seventeen, but nine of the lender institutions agreed to the use of the virtual courier. By using the virtual courier, the show spared 55.51 CO₂ tonnes. Had this tool not been used, the show’s carbon emissions would have increased by 74 percent due to the couriers’ travels.

DEPARTURE	ARRIVAL	CLASS	TRAVEL MODE	KG CO ₂ E
Philadelphia (PHL)	Madrid (MAD)	Business	Return	3,064.00
New York (JFK)	Madrid (MAD)	Business	Return	2,840.00
Atlanta (ATL)	Madrid (MAD)	Business	Return	3,152.00
Washington, DC (IAD)	Madrid (MAD)	Business	Return	3,746.00
New York (JFK)	Madrid (MAD)	Business	Return	2,840.00
Atlanta (ATL)	Madrid (MAD)	Business	Return	3,152.00
Washington, DC (IAD)	Madrid (MAD)	Business	Return	3,746.00
New York (JFK)	Madrid (MAD)	Business	Return	2,840.00
Boston (BOS)	Madrid (MAD)	Business	Return	2,010.00
Philadelphia (PHL)	Madrid (MAD)	Business	Return	3,064.00
New York (JFK)	Madrid (MAD)	Business	Return	2,840.00
Atlanta (ATL)	Madrid (MAD)	Business	Return	3,152.00
Washington, DC (IAD)	Madrid (MAD)	Business	Return	3,746.00
New York (JFK)	Madrid (MAD)	Business	Return	2,840.00
Atlanta (ATL)	Madrid (MAD)	Business	Return	3,152.00
Washington, DC (IAD)	Madrid (MAD)	Business	Return	3,746.00
New York (JFK)	Madrid (MAD)	Business	Return	2,840.00
Boston (BOS)	Madrid (MAD)	Business	Return	2,010.00
ACCOMMODATION				
COUNTRY	N ROOMS	N NIGHTS	FACTORS	KG CO ₂ E
Spain	18	36	20.27	722.64

31 NATALIA GUZA, MARIA MALLOI AND CAMINO PRIETO CADENAS

CLOSING REMARKS

Virtual couriering does not eliminate the carbon footprint of exhibitions, nor does it resolve the structural dependency of the contemporary art system on mobility. However, it introduces a measurable reduction in emissions associated with courier travel and signals a willingness to interrogate habitual practices.

More significantly, it contributes to an emerging discourse in museum practice that seeks to align ecological responsibility with professional rigour, rather than with purely symbolic adjustments.

Virtual couriering occupies a pragmatic middle ground; it is neither a transformative rupture nor a cosmetic gesture, but a recalibration of procedures within the existing framework of international exhibition-making.

Besides exploring this tool, the present analysis has also made clear the carbon footprint of several aspects of museum practice. Only by knowing the exact figures are we able to create protocols or decision trees adapted to our own daily practice as museum professionals. The prevailing criterion shall remain the conservation of the artwork, and even though virtual couriering is possible, this does not mean that it is always advisable. However, knowledge of the greenhouse gas emissions of artwork loans may in future contribute to decision-making that takes greater account of the projected duration of any given loan arrangement as well as artworks' places of origin.

COMMITMENTS BY MNCARS

- Using virtual couriers whenever conservation conditions and installation requirements allow it, and when the lender accepts this option after carefully evaluating its viability according to the criteria and considerations outlined in this text.
- Measuring Scope 3 carbon emissions associated with MNCARS operations, a process initiated in 2025.
- Analysing the results of carbon footprint reports to identify actions, protocols and decision-making frameworks that can be implemented at MNCARS to reduce emissions at both the operational and curatorial levels.

DIGITAL ECOLOGY: L'INTERNATIONALE ONLINE

NICK AIKENS

In May 2023 the newly assembled editorial board of L'Internationale Online held an in-person meeting at HDK-Valand, Gothenburg. In that meeting a new editorial vision for the platform was articulated – a platform that would be more integrated into the ongoing research and concerns of the 'Museum of the Commons', the current four-year project of the confederation. Integration here was understood on a content level: editorial lines that would respond to the three assemblies of the project – 'Past in the Present', 'Situated Organizations', and 'Climate'; and publishing that would produce more diverse content with regular publishing rhythms, and that would be conceived with specific reader groups in mind. However, integration was also understood operationally: How could our modes of publishing and the infrastructure reflect some of the politics we laid claim to standing behind? What would this mean for questions of translation and non-English publishing, for example? How could the platform recentre practice? And what would an ecosocially conscious platform look like? With these factors in mind, the board arrived at the conclusion that the then-existing platform could not meet those needs, claims or desires, and we decided to embark on a reconceptualization and redesign.

Under the stewardship of Anja Groten (designer), Joel Galvez (programmer) and Karl Moubarak (website accessibility and ecology), the new platform was launched in February 2024. In the brief to Anja, Joel and Karl, specific emphasis was placed on the ecosocial vision for the platform. For example, the editorial board stipulated the need to minimize energy usage via green coding and hosting and minimal transfers, to deploy ethical UX/DEV features such as intuitive structure and naming, and to avoid dark patterns. During this process, we also held meetings with Joanna Murzyn / Digital Ecology Institute, who wrote a series of recommendations, also published in this volume. Key recommendations from the Digital Ecology Institute that were implemented by the design team included the use of lightweight design and open-source software.

As we developed the platform, a number of editorial decisions were impacted by our prioritization of its ecological footprint. For example, on previous versions of the platform we programmed screenings

of films on a rolling basis, inviting practitioners to show short videos for a number of months. While the new editorial vision prioritized foregrounding artistic practice, rather than discursive positions, we opted to move away from this programme as it entailed long loading times of heavy material. In turn, this decision opened up a generative discussion about how to include film practice on a publishing platform away from a screening model. Instead, we invited artists to integrate shorter excerpts of film material into essays and text-based contributions, resulting in a far richer engagement with the work within the 'Sonic and Cinema Commons' publishing strand.

The final infrastructure of the platform entailed technical decisions to minimize the platform's ecological footprint by reducing load times and the number of scripts used, as well as optimizing code and minimizing digital waste. A focus was placed on mindful design and the content management system was developed through open-source software. These considerations went in tandem with other design decisions, like the use of the AUTHENTIC Sans Pro typeface and the commissioning of new glyphs to accommodate the diversity of languages in the confederation. All of these can be found in the colophon and in the online document 'Ecology and Accessibility', also published in this volume. We hope that this document can serve as a tool and reference for others.

It's important to note that while L'Internationale Online has taken important steps to address questions of ecology within its publishing infrastructure, this is the beginning of a journey and lots more work remains to be done. Most significantly perhaps, the confederation as a whole runs much of its storage, email accounts and analytics through Google, and uses Google Analytics to accumulate and analyse user statistics and patterns. I would like to see a transition to open-source services and softwares as soon as possible, mindful of the labour and logistical challenges this would entail. It's also important to note that while we were able to make a platform that was ten times lighter than its predecessor, an important next step would be to start to look at and analyse the types of servers we are using, where most of the energy expenditure happens. Equally, while the online platform is the only shared space within the confederation, digital and online infrastructures within the individual partners remain at the institutional level and are often dependent on policy decisions at city, regional or national level.

As with the wider purpose of this publication, the decision – or need – to engage climate at both the

thematic and operational level remains central to the work of L'Internationale Online. It runs through the multiple contributions that comprise our 'Land Relations' publishing strand – most distinctively, perhaps, in the title of the publication *The Climate Reader: Propositions, Poetics, Operations* (2026). Beyond the first step of the platform, the challenge now is to address the wider digital infrastructures operative within the confederation.

INTRODUCTION

In an age where digital is inherently physical, everything we do online leaves behind an environmental footprint. Growing awareness of the vast energy consumption and emissions from data centres, network infrastructure and electronic devices prompted us to reflect on our commitment to minimizing the digital impact of L'Internationale.

We have successfully reduced our new website's footprint and improved its speed and accessibility. The current version is almost ten times lighter than its previous incarnation. This optimization demonstrates our commitment to minimizing our online environmental impact. Please read our journey below, be inspired and share with others.

LIGHTER, FASTER AND LESS JAVASCRIPT

- **Faster page load time:** By optimizing the initial load size from 8 MB to 800 KB, our website's home page is now loading faster, providing a better user experience, especially for visitors with slower internet connections.
- **Reduced bandwidth usage:** Decreasing file sizes reduces data transfer requirements between the server and the user's device, resulting in lower bandwidth usage and costs, especially environmentally.
- **Improved mobile experience:** Lightweight websites typically perform better on mobile devices, especially in regions with limited internet access, where bandwidth and processing power may be constrained.
- **Optimized code:** Having only essential scripts (reduced from twenty to five) and one highly compressed stylesheet (down from six) indicates a more optimized and efficient codebase. This also makes maintenance easier and improves the overall stability of the website.
- **Minimizing digital waste:** Optimizing data transmission and reducing unnecessary data has resulted in reducing the amount of invisible digital waste. Unneeded data not only increases energy consumption but also strains

ECOLOGY OF ATTENTION TO ACCESSIBILITY

In our process, we have also considered the ecology of attention, which involves managing individuals' cognitive resources in the digital world responsibly. Given today's information overload and constant digital stimuli, we have prioritized designing a website and content that respect users' attention spans. Our approach to this challenge encompasses:

- **Mindful design:** We have focused on clear and simple design to minimize mental effort, ensuring that content is meaningful and free from unnecessary distractions.
- **Ethical practices:** We have steered clear of using dark patterns and manipulative design strategies that take advantage of cognitive vulnerabilities. Instead, we prioritize transparency and honesty in providing information.

ENCOURAGING OFFLINE READING

The environmental impact of digital versus physical formats such as paper is not straightforward and depends on a number of factors, including file size, energy used in production, and disposal methods. Online reading is more sustainable for occasional use, while print is a better choice for repeated, longform or shared reading.

This is why most articles on our website include the estimated reading time upfront, so you can plan accordingly. They are also available for download in .epub or .pdf formats, encouraging you to read offline.

It's worth noting that if you've opted for the digital version of an article, to better understand its environmental cost, it's worth first considering the device that will allow you to read it: your 16-inch laptop.

The environmental impact of producing a single laptop is mainly due to the manufacturing process, which accounts for about 70–80 percent of the total emissions. The rest of the emissions come from transport (around 5–10 percent) and the actual use of the laptop (around 10–20 percent).

On average, a laptop has a carbon footprint of about 422.5 kilograms of carbon dioxide equivalent, which includes the carbon emissions from manufacturing, transportation and the first four years of use.

FREE AND OPEN-SOURCE SOFTWARE FOR READING

If you want to take a step forward and reduce the energy associated with online reading, consider using an open and free desktop reading tool such as Okular (<https://okular.kde.org/>).

This is the first software product to be awarded the Blue Angel ecolabel by the German government for its resource and energy efficiency. The software has lower performance requirements, resulting in a longer life for the hardware on which it runs. In addition, this solution has a high level of transparency, giving users greater freedom in how they use it.

E-READERS FOR HEAVY READERS ONLY

The environmental benefit of e-readers lies in their ability to replace many printed books over their lifetime. For example, if an e-reader replaces at least thirty-six physical books, it is balancing out its footprint within the first year of use.¹² Heavy readers who continue to use their e-readers for several years can significantly reduce their carbon footprint compared to those who only read printed books.

But if you are a light reader and only browse through e-books a few times a year, stick with paper.

CLOSING THE LOOP

On top of this, most of our electronic devices, from e-readers and smartphones to laptops, present significant challenges due to their short lifecycles and the difficulty of recycling them, resulting in the loss of valuable materials and increased waste.

Our commitment to creating an optimized website that manages data efficiently and reduces the strain on devices when interacting with our content also indirectly promotes longer device lifecycles.

Encouraging responsible consumption by avoiding overly resource-intensive features and promoting a culture of mindful digital use also contribute positively to reducing the stream of electronic waste.

This is why we believe it is important to raise awareness of the environmental impact of constant device upgrades and to encourage our community to extend the life of their existing devices.

12 'Is It Better for the Planet to Read Online or in a Paper Format', *New Scientist*, 10 February 2021, <https://www.newscientist.com/lastword/mg24933211-400-is-it-better-for-the-planet-to-read-online-or-in-a-paper-format/>.

DIGITAL SUSTAINABILITY AS A CONTINUOUS JOURNEY

We recognize that the digital realm is intertwined with the physical world, and our responsibility extends beyond mere aesthetics and functionality. By embracing a sustainable and eco-friendly approach to web development, we aim to make a positive contribution to the global effort to reduce the environmental footprint of the digital landscape.

Our commitment to environmental sustainability is an ongoing journey. We do recognize and are fully aware of the environmental impact of online analytics tools such as Google Analytics. To find out more about the environmental costs of tracking technologies, take a look at the 'Carbolytics' project and analysis: <https://carbolytics.org/>.

In response, our next step will be to make our website even lighter by adopting tracking technologies that prioritize user privacy and steer clear of contributing to surveillance capitalism.

Please come back to this page some time and check for updates to our pledge.

SOCIAL SUSTAINABILITY AND ENERGY SOVEREIGNTY: THE PARTICIPATION OF MUSEUMS IN URBAN ENERGY COMMUNITIES

ANDREA MIGUEL

INTRODUCTION

This chapter explains how a project initially conceived for the installation of photovoltaic panels on the roof of the Museu d'Art Contemporani de Barcelona (MACBA) has led to the museum's active participation in the first energy community in the Raval neighbourhood, where the institution is located. This commitment responds to a broader concept of sustainability, which considers MACBA as an organization located in a specific environment, going beyond the energy efficiency of the facility itself to embrace a logic of territorial co-responsibility and social commitment.

The aim of this text is to share this experience with other agents and professionals in the cultural and sustainability sector, highlighting the role that public cultural facilities can play in the local energy transition, contributing to reducing energy poverty, strengthening the community and democratizing the energy system, in accordance with municipal and European regulatory frameworks.

The project is being developed through coordinated work between different teams at the museum. The sustainability department is responsible for strategic planning and ensuring that the project fits in with the institution's climate objectives; the architecture department is in charge of tendering for the installation of the panels and technical monitoring of their operation and maintenance; and the purchasing department manages the collaboration agreement and the agreements established within the framework of the energy community. This internal governance has been key to enabling collaboration with other entities in the neighbourhood, joining existing networks to offer a greener, more sustainable and fairer energy alternative.

The project is also monitored by MACBA PLANET, the museum's green team. This is an interdepartmental and multidisciplinary group made up of professionals from different areas, which meets quarterly to discuss and evaluate the environmental initiatives being developed at the institution. Its areas of work include, among others,

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drafting the museum's environmental policy, opening a free climate shelter to the public, setting up a bicycle parking facility for staff and visitors, and developing a tool to measure the carbon footprint of each exhibition.

THE PHOTOVOLTAIC PANEL PROJECT AT MACBA

From an environmental perspective, a significant portion of the museum's carbon footprint is associated with its depreciation, which is mainly connected to its building. Given that this structural impact cannot be reduced in the same way as other kinds of operational consumption, the museum considered what other uses, beyond its main mission, it could offer to help mitigate this impact. In this process, the building's roof was identified as an underused space with potential for the installation of photovoltaic panels to generate energy and reduce the energy consumption of the facility.

In this context, it is important to note that in 2018, MACBA began transitioning towards purchasing all of its energy from renewable sources, reaching 100 percent in 2022. Thanks to this, the museum avoided the emission of 2,774.58 tonnes of CO₂e into the atmosphere between 2018 and 2024. The installation of photovoltaic panels, therefore, was not only a response to MACBA's own consumption criteria, given that all the energy it consumed was already from renewable sources, but also stemmed from a desire to generate added social return from the local production and distribution of energy.

THE ENERGY COMMUNITY DEVELOPMENT FRAMEWORK

The Ciutat Vella district, where the Raval neighbourhood is located, is characterized by a high population density and a high concentration of tourist and economic activities as well as public facilities. On the one hand, there are buildings with roofs available for installing photovoltaic panels and with the capacity to generate renewable energy; on the other, there are households with difficulties in accessing adequate energy supplies. This project addresses this challenge from an ecosocial transition perspective.

In parallel with the technical study for the installation of the panels, and through the neighbourhood community roundtables in which the museum actively participates, MACBA learnt of the initiative to create an energy community in the Raval neighbourhood, promoted by various local agents. It was in this context that the desire arose for MACBA to be part of the project, sharing part of the energy generated

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ANDREA MIGUEL

with vulnerable families in the neighbourhood and thus reinforcing community practices of sustainability, social justice and climate justice.

The energy community is led by La Traginera de Ciutat Vella, and is made up of the Impulsem cooperative, the Tot Raval Foundation, Laboqueria Arquitectura, UGT Catalunya, Ciutat Vella Environmental Classroom, Ecoserveis (technical support), the Ciutat Vella Sports Association and MACBA. It proposes a strategy of cooperation between public institutions, social and cultural entities and the local economic fabric.

Energy communities are local entities that promote more democratic, decentralized and common good-oriented models of energy participation, production, redistribution and consumption.¹³ These entities have gained relevance since the introduction of the European Union directives on Renewable Energy Communities (RECs), which recognize their role in the energy transition and promote their development in member states.¹⁴

Emissions reduction and, more specifically, the transition to renewable energies are among the central pillars of contemporary climate policies. However, many academics point out that such transitions are not inherently fair or inclusive and that, in the absence of mechanisms to ensure redistributive and participatory structures, they can reproduce or increase pre-existing social inequalities.¹⁵

For this reason, since the beginning of the process of establishing the energy community, we have worked with a variety of entities that contribute specialized knowledge in different areas. This collaboration has allowed us to make progress in identifying available roofs in the neighbourhood where the installation of photovoltaic panels is possible, to involve organizations capable of referring vulnerable families through social services, and to involve architectural firms that can offer home improvement workshops aimed at reducing energy bills. It has also allowed us to develop specific interventions to implement these improvements, among other aspects.

13 Gordon Walker and Patrick Devine-Wright, 'Community Renewable Energy: What Should It Mean?', *Energy Policy*, vol. 36, no. 2, 2008, pp. 497–500; COME RES, 'Community Energy for the Energy Transition: Policy Recommendations and Best Practices', 2021.

14 'Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the Promotion of the Use of Energy from Renewable Sources', *Official Journal of the European Union*, L 328/82, 21 December 2018.

15 Benjamin K. Sovacool, Matthew Burke, Lucy Baker, Chaitanya Kumar Kotikalapudi and Holle Wlokas, 'New Frontiers and Conceptual Frameworks for Energy Justice', *Energy Policy*, vol. 105, June 2017, pp. 677–91; Kirsten Jenkins, Darren McCauley, Raphael Heffron, Hannes Stephan and Robert Rehner, 'Energy Justice: A Conceptual Review', *Energy Research & Social Science*, vol. 11, January 2016, pp. 174–82.

The energy community is also governed through assemblies where strategic decisions are made on energy management, shared services and the social criteria of the project.

THE INSTITUTIONAL FRAMEWORK: CLIMATE POLICIES AND DEMOCRATIC PARTICIPATION

The Raval energy community is an objective of the Pla Clima municipal strategic plan, whose goal is to achieve climate neutrality and a city resilient to climate change by 2030. This plan recognizes that climate action must be accompanied by social justice policies, emphasizing community participation, the promotion of local projects and the diversification of funding sources as pillars of a just transition.¹⁶

The collaboration between agents provides institutional legitimacy to the project and reinforces its strategic nature within municipal and European ecosocial transition policies.

From the perspective of cultural sustainability, it is argued that museums should integrate sustainability not only into their discourses or programming, but also into their infrastructures, governance models and relationships with their surroundings.¹⁷

SHARED CONSUMPTION AND REDISTRIBUTION OF ENERGY: THE CASE OF MACBA

In technical terms, the project initially envisages the installation of 60 kW of photovoltaic power, of which 10 percent is allocated to the direct transfer of energy to vulnerable households in the neighbourhood. This proportion is equivalent to 6.0 kW, which will benefit approximately twelve families, with an average allocation of 0.5 kW per household.

The installation generates around 91,110 kWh per year, with roughly 9,110 kWh allocated to these households. This translates to an estimated saving of approximately 700 kWh per family per year, equivalent to between 115 and 145 euro annually.

The project established a minimum commitment to allocate 10 percent of the energy produced, with the possibility of increasing this percentage once the initial investment has been recouped, thus reinforcing its social commitment in the medium and long term.

16 Ajuntament de Barcelona, 'Pla Clima 2018–2030: Compromisos i accions per una Barcelona resilient davant del canvi climàtic', 2018.

17 Programa IBERMUSEOS, 'Museos y sostenibilidad: Recomendaciones para la acción', 2020.

The criteria established are those provided by the social services of Ciutat Vella, ensuring consistency with existing public policies and avoiding arbitrariness. The selection of beneficiaries will be made through calls for applications managed by social services or the Energy Advice Point (PAE), and will be reviewed periodically to adapt to changes in the living conditions of households.

In addition to energy supply, the community will offer shared services such as training and awareness-raising on energy transition, rehabilitation and recirculation of equipment, and other kinds of support. This comprehensive approach responds to the fact that energy poverty is a multidimensional phenomenon, linked not only to the price of energy, but also to access to information, skills and support networks.¹⁸

**CHALLENGES AND LIMITATIONS OF THE ENERGY
COMMUNITY MODEL**

Despite its potential, this model also presents a number of challenges. These include administrative and regulatory complexity, difficulties in becoming a legal entity and obtaining initial financing, as well as the need to ensure effective participation of the most vulnerable households in governance, avoiding processes of exclusion or the concentration of power in actors with greater influence within the project.¹⁹

Likewise, as is the case with many cultural facilities, photovoltaic installations in buildings of heritage value require specific technical solutions and impact assessments that reconcile the sustainability and conservation of these buildings.

CONCLUSIONS

The case of the Raval energy community is a significant example of how social sustainability can be achieved in the urban energy transition. It also demonstrates that the responsibility and involvement of cultural institutions, historically understood as spaces of legitimacy, can go beyond reducing consumption and actively contribute to building cities that are more socially and climatically just.

¹⁸ Stefan Bouzarovski, 'Energy Poverty in the European Union: Landscapes of Vulnerability', *Wiley Interdisciplinary Reviews: Energy and Environment*, vol. 3, no. 3, May/June 2014, pp. 276–89.

¹⁹ COME RES, 'Community Energy for the Energy Transition'.



MACBA Community Garden. Photos: Andre Gaetano

Collaboration and networking with other actors in the territory are key factors in maximizing the impact of environmental projects and adopting a more holistic and inclusive approach, both towards the community and towards the museum itself. Therefore, participation in spaces for dialogue and debate in which to engage with other actors at the territorial level is essential.

This case shows that, beyond the existence of a figure responsible for sustainability in museums, sustainability must be understood as a cross-cutting line of work, involving all areas and teams of the organization in order to develop transformative projects with a real impact on the museum and the region. To this end, it is also essential to incorporate social and climate justice objectives and criteria into the museum's strategic plan and institutional mission, broadening the museum's vision and scope as a public institution.

INTRODUCTION

This chapter discusses the climate action organized by the L'Internationale confederation on 22 April 2026 – Earth Day. Conceived as a collective exercise in social sustainability, the action focused on art institutions and organizations cooperating with local climate activists, artists, scientists, communicators and engaged communities. The whole process – from planning, through building relationships, to executing the action – showed both the potential of the art world acting as an ally and supporter of the global climate movement, and the limits of the agency that entities such as museums and art academies have.

The idea for a collective climate action organized by L'Internationale was born during the L'Internationale Climate Assembly meeting in Venice in April 2024. There, representatives of the member institutions and organizations discussed possible ways of putting the idea of social sustainability into practice, focusing mostly on how museums, art NGOs and art academies can support climate activists as well as platform and amplify their messaging, especially in the face of the rising backlash against environmental policies, climate science and climate discourse, as well as against climate activism itself. Many ideas were floated, from climate-focused public and educational programmes, through tech-ins and assemblies, to writing statements and demanding political decisions at a national and European level. We also considered a more radical approach: closing down exhibitions and classes and letting activists occupy institutional spaces, or even shutting the doors of our museums, academies and spaces and literally going on strike.

THE ACTIVIST PERSPECTIVE

After the initial discussion, we turned to the climate activists to ask them for their opinions on what the art world could actually do to support the global climate movement.

For this purpose we organized the discussion panel 'Can the Artworld Strike for Climate?' as part of Climate Forum II in September 2024.²⁰ The goal was simple: to ask members of the global climate

20 <https://www.internationaleonline.org/activities/climate-forum-ii/>.

movement how art institutions can support their struggle at such a difficult moment – what are their needs, expectations and demands? – and if or how they could understand and imagine art institutions organizing a climate strike. What emerged from the discussion were three possible answers to the questions posed.

The first was given even before the panel itself, from Indigenous climate activists. We reached out to two Indigenous-led climate movements and organizations with an invitation explaining the basis for the panel as well as our motivations and goals. The first response was silence. Then, after some time, a respectful but very firm and telling rejection. We were told that they did not consider a panel organized by a confederation of European museums, arts organizations and academies a proper space to speak about their struggle for climate, environment, the planet and their rights. Neither did they feel there was much that art institutions can do to support their cause, or that they can do to support the art world in its pursuit of a climate strike. The implied advice was clear: people of the arts, discuss and figure this out among yourselves.

The second take was very different. It came from Kinga Parafiniuk, a member of the Polish chapter of the youth-led Fridays for Future movement, who agreed to participate in the panel. Before the event, she discussed the topic with her organization with a view to presenting a collective position, rather than an individual perspective. Kinga and her colleagues are young, local organizers often working beyond urban centres in northern Poland. They face opposition to climate activism on a daily basis and experience directly the consequences of the political shifts away from the climate cause. Their position was much more sympathetic towards the art system. Kinga claimed that Fridays for Future already considers the art world an ally in the climate struggle, with many connections and cooperations between activist and artistic circles. For them, every gesture, action, project and programme matters – whether it's through representation, discourse, education or simply platforming climate-conscious voices. She emphasized that in climate organizing, as in any other form of activism, there is space for different levels and modes of engagement – from organizing workshops to forming a human chain in order to block a street. If art institutions want to act for climate, they need to find a suitable way of doing it – even if that means sticking to climate-themed exhibitions, public and education programmes, or festivals and events. It would be better, she said, if these were co-organized in cooperation with

local climate movements and organizations – not only because they can bring in expertise and experience, but because they need public voices of support when they are routinely demonized and maligned. Still, what is crucial is for the art world to stay with the struggle and not abandon the question of climate as a topic and a cause, especially when popular, political and media support is waning.

The third, much less enthusiastic, came from Helen Wahlgren, co-founder of the Swedish movement Restore Wetlands and an active member of the A22 network, which is one of the most active European climate movements and the umbrella organization behind many of the notorious civil disobedience actions from the past couple of years. Helen is an experienced climate organizer and has been part of global environmental activism for many years, witnessing numerous ups and downs. In her powerful and moving contribution she presented the climate movement as part of the long history of protest, from the nineteenth-century workers' unions and early women's rights activists, through the civil rights movement, to contemporary anti-government protests toppling politicians throughout the world. She pointed out that a common element of most successful protest campaigns is disruption, and claimed that without disrupting the flow of everyday life, change is impossible. This is why, for her, the current art world's engagement with the planetary climate and environmental crisis is inadequate – all the exhibitions, lectures, education programmes and workshops are 'nice' but ineffective. Helen understood the proposal of a climate strike at face value: shut down museums, galleries and academies and stop any and all cultural or artistic activities, at least for a day. Or a weekend. Or a week, preferably a month. Or, even better, until the powers that be finally start working on addressing the crisis seriously. The best-case scenario for Helen would be for cultural workers to exit the art world altogether, organize and join activist groups. The only path to change, she stressed, is to disrupt hostile realities.

CLIMATE ACTION NOT CLIMATE STRIKE

All of these perspectives heavily influenced our internal discussions within the L'Internationale confederation regarding the joint climate action. Immediately after the panel, we wanted to pursue the most ambitious plan to organize a *real* climate strike: shut down institutions on a chosen day and prepare a programme of activities with local climate activist groups. Unsurprisingly, initial enthusiasm turned into uncertainty and prompted a number of questions: Can we, as institutions,

proclaim 'a strike'? Who would actually proclaim it? Wouldn't it be better coming from the bottom up? Would people working in L'Internationale institutions and organizations – artists, cultural workers, curators, educators, academics, researchers, administrators, managers, technicians and others – be eager to join? How would our audiences react? And the authorities, ministries, funders and sponsors? What are the risks involved? Would we get support from the media? Should we close down, or rather just stop normal activities and dedicate the day to climate education, platforming activists, scientists and organizers? Shall we release a statement? In whose name? Does it make sense to organize this climate action if, in the end, we are not able to strike, shut down or disrupt but only organize some thematic activities?

The more we dwelt on these questions, the more it seemed that the art world and its infrastructure is not, in fact, able to accommodate the needs and demands of climate activists. More and more, it became apparent that there was embarrassingly little we could do, especially in the face of a deepening anti-climate turn in global politics. When the time came to make final decisions, it turned out that only two institutions were ready to truly shut down for one day – which meant that even a symbolic strike was not a viable option.

Still, we decided to persist with the action, as eight L'Internationale members were ready to participate, even though it didn't mean closing down. Despite our doubts, we agreed that what we could do together was to platform the climate movement's perspective and work, voice public support for it and show that art institutions remain engaged with the climate question, despite the prevailing backlash. On 22 April 2026, Earth Day, each of the institutions, academies and organizations participating in the climate action presented a programme of activities, prepared in collaboration with representatives of the local climate movement. These included climate-focused seminars and presentations, fieldwork, workshops on climate-resilient seeds, reenactments of climate actions from the 1970s, a concert on deforestation and the depletion of water resources, discussions on urban community gardens and institutions acting as climate shelters, a reading session, as well as an assembly of local degrowth activists and scholars.

The activities were accompanied by a statement collectively written and signed by the representatives of L'Internationale institutions. It was published on the L'Internationale Online platform, and read publicly on the day of the climate action in each of the participating institutions. We publish the full statement below.



L'INTERNATIONALE CLIMATE ACTION ON EARTH DAY, 22 APRIL 2026

On 22 April 2026, we the cultural workers of L'Internationale, a European confederation of museums, universities and arts organizations, are marking Earth Day with a call to action and a statement of support to our friends, allies and comrades from the global climate movement.

All around the planet, we are witnessing a rising backlash against environmental policies and climate science, as well as against climate activists and organizations. Much of what the global climate movement has achieved in the past decade is now being lost, succumbing to the pressure of lobbyists, corporations and politicians. Environmental protections are being dismantled, climate policies revoked, transition plans put on hold, funding for climate causes cut, and emissions pledges cancelled. Increasingly, those engaged in the climate cause are facing ridicule, silencing, threats, and even criminalization and incarceration – both in Europe and worldwide.

Despite the inherent contradictions of the art world and prevalence of environmentally harmful institutional practices, the planetary climate and environmental crisis has been one of the key issues for L'Internationale and its partners for many years. This focus has translated into various educational, artistic, cultural and social programmes, projects and publications. The members of the global climate movement – artists, activists, NGOs, scientists, communicators and policymakers – have played a key role in those endeavours. They are our friends, allies, collaborators, teachers and partners. We recognize their vital contribution, not only to today's

science, politics and public discourse, but also to contemporary culture and arts. This is why, today, we want to express our solidarity with the global climate movement and protest against the prevalent anti-climate backlash.

We mark this year's Earth Day with the recognition that we are in a stark and difficult planetary moment. Yet we remain firm in our belief that now is not the time to dilute the priority of climate policies or to raise consumption rates in the European Union, including through militarization, but on the contrary to invest in ecological repair and regeneration across sectors. As cultural workers, we need to connect, collectivize and organize towards liveable future-making. We need to extend and expand our institutional reach and create space for the many inspiring climate action projects happening in our towns and neighbourhoods.

This is why we are marking Earth Day 2026 in three ways:

1. **Collective actions and programmes:** We are publishing a list of activities and programmes, organized in conjunction with local climate organizations, activist groups, NGOs, scientists, artists and communicators, taking place across L'Internationale partners. The programme includes workshops, performances, actions and publishing.
2. **Amplifying and supporting local initiatives:** We amplify and platform the voices, experiences and perspectives of local climate initiatives through joint activities and publishing.
3. **Institutional responsibility:** Heeding the words of our mission statement, which foregrounds solidarity, planetary responsibility and a commitment to contribute to a liveable planet, we call on members of L'Internationale and invite other cultural and artistic institutions, organizations and academies to:
 - Prioritize, uphold and practically implement concrete sustainable, climate-conscious practices and infrastructural changes that aim at lowering the emissions and minimizing the environmental impact of the art and culture ecosystem;
 - Support and keep collaborating with the local and global climate movement: activists, artists, NGOs, scientists, policymakers and communicators;

- Keep the planetary climate and environmental crisis as a key question to be addressed in their programming and activities, including exhibitions, artistic activities, education and public programmes, and research projects.

Parts of this chapter were previously published in The Climate Reader: Propositions, Poetics, Operations, under the title 'Can the Artworld Strike for Climate? Three Possible Answers'.²¹

²¹ <https://internationaleonline.org/publications/the-climate-reader-propositions-poetics-operations/>.

INTRODUCTION

'Trash' was a one-month programme taking place on the ground floor of Salt Beyoğlu. At its core lay a large-scale installation constructed entirely from the physical remnants of past exhibitions, accompanied by a series of workshops and public talks.

The programme traced the materials used for Salt's exhibitions over the past fifteen years, whether for display units, structural supports or auxiliary elements for artworks. Salt's storage served as the primary site of research, revealing a layered material archive shaped by repeated use and modification. Designers and artists who had previously worked within the institution, particularly exhibition designers concerned with material systems, formed the backbone of the public talks, framing discussions around exhibition infrastructures, material lifecycles and sustainability. The ground floor of Salt Beyoğlu, also called Forum, functioned as a permeable extension of the street, a strategic location that minimized the carbon footprint and labour required for transporting and installing material remnants. Here, whether raw or processed, materials were cut to standardized dimensions and prepped for immediate reuse.

Complementing these discussions, the workshops, led by invited industrial designers, architects and design studios from universities, functioned as practical platforms for collective problem-solving. Their primary aim was to extend the lifecycle of materials retrieved from storage by addressing specific functional needs across Salt's buildings. These interventions included creating comfort zones for the Walk-In Cinema; designing plinths, shelves and shading elements for the Winter Garden; and developing seating and lighting units throughout the building. Production also extended to functional objects for public spaces such as the library, bookstore and café, alongside logistical tools, custom carriers for installation teams and organizational systems for storage spaces.

WASTE AND TRASH

The programme derived its name from a critical reading of exhibition-making and the invisible systems that sustain it. Central to this

critique is the tension between waste and trash. While ‘waste’ suggests finality, a material stripped of value and destined for disposal, ‘trash’ implies disorder, a temporary state of displacement, a pile of resources awaiting reassessment.²² Trash is not an intrinsic quality, but a designation assigned by use. A plinth that supports an artwork in an exhibition can instantly revert to debris in storage once its function is exhausted. This abrupt shift exposes how precarious value can be. Recognizing this threshold requires institutional awareness. When materials are framed as waste or trash, institutions often naturalize decisions that are in fact contingent, temporal and reversible. By intervening at this moment of ambiguity, the programme reframed the exhibition space not as a site of disposal, but as an active sorting facility for recoverable materials.

This approach entered into dialogue with the artist Céline Condorelli’s spatial intervention *Surrounded by the Uninhabitable* (2012). By dispersing the reception area and generating multiple seating scenarios, Condorelli’s installation encouraged those moving along İstiklal Street to enter Salt Beyoğlu and experience it as a publicly inhabitable space. Through the reactivation of support structures from the exhibition ‘Scramble for the Past: A Story of Archaeology in the Ottoman Empire, 1753–1914’ (2011) at Salt Galata, the work proposed new patterns of movement, use and encounter – foregrounding how infrastructural elements can quietly reorganize social space. As Condorelli notes, a support structure succeeds precisely when it withdraws, becoming invisible in order to allow the artwork to come forward.²³ This logic closely resonates with my own practice in exhibition design and production at Salt over the past decade, where scenographic invisibility has often served as an operative guide. Yet this apparent silence is deceptive. Even the most minimal spatial gesture, a subtle shift in lighting, a material choice, a specific colour, conceals a back-end process that is logistically dense and labour-intensive. While the result may appear effortless, the reuse that enables it is anything but simple. In this sense, ‘Trash’ operated as a critique of institutional sustainability frameworks, exposing the hidden costs and systemic effects often masked by seamless presentation. The institution functioned simultaneously as a support structure for this discussion and as a subject under examination.

²² This conceptual distinction is derived from Michael Thompson, *Rubbish Theory: The Creation and Destruction of Value*, Oxford: Oxford University Press, 1979, which distinguishes between ‘rubbish’, ‘transient’ and ‘durable’ objects, understanding rubbish as a culturally produced category rather than an intrinsic material condition.

²³ Céline Condorelli, *Support Structures*, Berlin and New York: Sternberg Press, 2009.

Beyond the gallery walls, similar invisible systems emerged with-in architectural and research-based practices, revealing how support structures operate across different scales of production. In *We’re Papermen* (2003), artist Can Altay examines waste pickers as an informal layer of the city. Largely absent from public visibility, they nonetheless operate as a critical metabolic support structure for urban life, sustaining systems of circulation, reuse and value production. This parallel reflects how exhibition-making relies on concealed infrastructures of labour, extending the inquiry of ‘Trash’ to forms of work that operate both in and for the art institution.

Shifting focus from the finished design object to the extractive and organizational processes behind it, FormaFantasma’s *Cambio* (2020) traces timber back to forests and factories, revealing the ecological and social costs embedded in material journeys. Even at the institutional scale, tracking the circulation of materials across exhibitions and treating stored remnants as resources becomes an institutional responsibility rather than a purely logistical concern.

RECOVERED MATERIALS

Spatially, ‘Trash’ found a close point of reference in the German Pavilion’s ‘Open for Maintenance’ at the 18th Venice Architecture Biennale. Materials recovered from more than forty installations from the previous Biennale were collected and catalogued, ready to be used for repairing and upgrading buildings and public spaces across the city. Rather than functioning as a representation of reuse, the exhibition operated as a useful infrastructure, encouraging both visitors and architects to explore new approaches to material use, particularly through practices of repair. In doing so, the project drew attention to the need to transform the discipline of architecture by engaging social actors more directly in processes of spatial production.

The workshops and talks were held at the centre of the space while surrounded by the material repository, activating this dormant storage as a site of production. As materials were categorized according to their institutional cycles, and erased over time by use, visitors came to recognize how function, identity and value overlap, collectively shaping the exhibition identity of the institution. A wooden bar, for instance, might appear as a visible display element in one exhibition or as a hidden structural component behind a temporary wall in another. It might become part of an artwork either visibly or invisibly, serve as packing material within a crate, or be cut and reworked multiple times,



Trash, Salt Beyoğlu,
2026. Photos:
Metean Bars



continuing its life in different formats. In this sense, sustainability and upcycling become integral to the identity of exhibitions at Salt.

The most straightforward categories included materials that retain their original form or material quality, such as carpets, curtains, tables, custom seating units and simple lighting filters. For certain rigid materials, particularly glass and Plexiglass, where recutting involves significant labour and transportation costs, reuse often takes place through surface-based interventions, including uv printing or the application of transparent vinyl. Similarly, Forex boards, commonly used as graphic or text-based backgrounds, constitute one of the most prevalent invisible support structures in exhibition-making. For instance, the temporary graphic cards produced for daily programmes and designed by Wrkshps, the studio responsible for Salt's first visual identity in 2010, continue to be reused both as structural components within exhibitions and as base materials for packaging. In 'The 90s Onstage' (2022), a large-scale installation constructed from metal pipes was suspended from the ceiling using only small, nearly

invisible Forex boards placed above the mesh ceiling. Given the need to protect all components of Salt's historic building, such discreet and non-invasive details become crucial. In keeping with the theme of the exhibition, as an exploration of performances of the 1990s that originally took place in undesigned environments such as streets or factories, the project relied primarily on materials drawn from storage, even retaining damaged pedestals in their existing condition. One year later, the same metal pipes were reactivated as invisible support structures for several artworks in Handan Börüteçene's retrospective exhibition 'In the Realm of Three Inland Seas' (2023), demonstrating how materials continue to circulate, adapt and accumulate institutional memory across exhibitions.

The 'Office of Useful Art' (2019–21), which took place on the third floor of Salt Galata, was centred on the notion of *arte útil*, loosely translated as 'useful art', a framework that proposes art as a tool or a device rather than a purely representational object. Alongside presenting new case studies from Turkey and hosting discussions and workshops, the project sought to construct its spatial framework almost entirely from materials reused from previous exhibitions. With this motivation, display elements from 'One and the Many' (2016) were reconfigured and assigned new functions. The metal and wood structures that once served as primary display units were transformed into coat hangers and shelving for the *arte útil* publication, while the interactive 'copy table' from the same exhibition was split into two to form round tables. The modular seating units designed for the centre of the office, distinctive in both form and flexibility, remain in use across different programmes more than six years later, underscoring how reuse can extend the life of exhibition infrastructure beyond its original context.

The recent exhibition 'We Have Been at the Tapestry Studio Since the 90s' (2025) centred on material experimentation as a core aspect of its exhibition design. One of the largest installations in the show was constructed from high-density corrugated cardboard, a material initially used as backing for standard framing and here repurposed as the primary structural element for two architectural façade representations. As the exhibition focused on the groundbreaking educational productions of the Tapestry Studio at Mimar Sinan Fine Arts University, paper-based materials, particularly corrugated cardboard, took a central position both conceptually and spatially. In this way, the exhibition design aligned itself with the pedagogical ethos of the studio, transforming the act of exhibition-making into a form

of material research that engages directly with what is available on the market rather than introducing external or unfamiliar systems.

CONCLUSION

‘Trash’ kicked off with introductory presentations by Selva Gürdoğan and Gregers Tang Thomsen, founders of the architecture and design studio Superpool, alongside workshop facilitator Ahmet Sertaç Öztürk and myself. Over five weeks, the Forum transformed into an active production space, hosting conversations, curious visitors, and professionals eager to contribute to the project.

A series of online and in-person talks provided a platform to explore diverse approaches to exhibition design. Architect and curator Carlos Mínguez Carrasco, chief curator at the Swedish Centre for Architecture and Design (ArkDes), discussed the role of exhibition design in presenting and preserving collections. Artist, designer and academic Can Altay, together with designer and cultural manager Aslı Altay, examined the exhibition space, display units and graphic elements as active components shaping how content is experienced. Architect and curator Ippolito Pestellini Laparelli presented the interdisciplinary work of his studio 2050+, highlighting scenographies that transform exhibition infrastructures into narrative tools addressing political, ecological and social questions. In the closing keynote, architect and designer Aslı Çiçek reflected on reuse and material decision-making across her projects, from temporary exhibitions to permanent scenography and stage design.

‘Trash’ brought together different types of materials within the exhibition space to open a discussion not only on material reuse and upcycling within institutions, but also on the habits, constraints and necessities that shape exhibition design practices. Reading a material’s journey reveals multiple layers, both within and beyond the institution, and highlights how each decision along this path carries significant weight. As ‘Trash’ did not seek a final product, the installation itself remained intentionally open-ended. To sustain this ongoing discussion, Salt aims to build a network with the architecture and industrial design departments of the universities, developing structured routes for the material circulation and reuse of remnants generated by future projects. This vision found its first tangible expression on the final day of the programme, which concluded with Aslı Çiçek’s talk: visitors claimed many of the raw materials and exhibition units that remained unused after the workshops, marking the first actual step towards a future of collective material sharing.

The team behind ‘Trash’ were:

Programme: Emirhan Altuner

Advisor: Can Altay

Workshop Facilitator and Advisor: Ahmet Sertaç Öztürk

Editor: Ezgi Yurteri

Programme Assistants: Fulya Aras, Ayşe Bıçak

Installation: OCD Museum Works, 3T Reklam

A MUSEUM AS ECOSYSTEM: HOW AN ARTISTIC PROJECT TRANSFORMED A MUSEUM'S ECOLOGY

LOTTE BODE

INTRODUCTION

Sometimes it is not a strategic plan or a sustainability objective that sets an institution in motion, but an artistic practice. The project *Apple. An Introduction (over and over and once again)* by artists Antje Majewski and Paweł Freisler shows how a long-term collaboration can spark unexpected processes that activate a museum, its partners and even the city around it. Through new collaborations, shared knowledge, tree-planting initiatives and even the emergence of a rooftop garden, this case study reveals how intertwined actions can bring an ecosystem to life that extends far beyond the exhibition space.

GREENING THE ROOF

Those who visited the rooftop of M HKA in 2025 discovered not a typical museum site, but a green oasis in the middle of the city. A rooftop farm with vertical growing walls, a pond, a greenhouse and an environment for sustainable agriculture created a new public space on top of the museum. The transformation was the result of close collaboration between M HKA and the nonprofit Volle Grond, the team behind the existing rooftop farm at PAKT, a former warehouse in Antwerp.

The rooftop terrace of M HKA is accessible to everyone during opening hours – museum visitors and passers-by alike. The garden's growth is visible season after season. It is maintained by the members of Zuiderdaken, a one-year training programme in which Antwerp residents learn urban agriculture under the guidance of experienced urban farmers from Volle Grond. By caring for the plants in all conditions, the members turn the garden into a shared learning environment. Internationally, the project is gaining attention as part of a broader movement that reimagines museums as infrastructures for care, commons and urban renewal.

Although the rooftop garden was not conceived as part of the artistic project by Antje Majewski and Paweł Freisler, the project did form an indirect outcome of their trajectory at M HKA. It offers a vivid example of how an artistic project can set unexpected developments in motion.

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As part of the broad Superhost trajectory with artists Majewski and Freisler – whose project unfolded through multiple phases of sustainable, collaborative and participatory practice – curator Joanna Zielińska initiated conversations with Ecohuis, the municipal service that advises citizens on energy and renovation. Ecohuis connected the museum with Volle Grond, which at that moment happened to be searching for new rooftop locations. Out of this chain of encounters, the garden emerged – one of several directions in which the Superhost project continued to grow, often in ways that could not have been foreseen.

SUPERHOST: A FRAMEWORK FOR DEEP EXCHANGE

Through the Superhost format, M HKA collaborates each year with an artist or collective who takes on a dual role as both guest and host. The format allows for long-term exchange between artist, museum and audience, resulting each year in different outcomes – installations, talks, workshops, publications. Each Superhost is given full access to the museum's sixth floor as a dedicated space for their year-long project. In 2024, Joanna Zielińska invited Antje Majewski and Paweł Freisler as Superhosts, presenting their project *Apple. An Introduction (over and over and once again)*. Over the course of the year, the project took shape through close collaboration with colleagues from artistic presentation and mediation teams.

This long-term participatory project began ten years ago at the Museum Sztuki in Łódź and developed further in Germany, Switzerland and Kazakhstan. In each context, Majewski and Freisler have collaborated with local artists, activists and scientists. Together, they have explored the double nature of apples: as art objects and as reference points in discussions on biodiversity, migration and ecological responsibility. At M HKA, the project continued this trajectory, shaped by local partners and new lines of inquiry.

The Polish visual artist Paweł Freisler lives reclusively in Sweden and communicates exclusively by email. Within the artists' shared practice, this deliberate distance is not incidental but constitutive. Majewski therefore took on an active, mediating role, with the agency to communicate, translate and develop the project in close dialogue with the museum team. She travelled to Antwerp several times and worked on site with the curator and staff involved in the project.

Because her presence was not required at all times, the collaboration differed significantly from a traditional residency. As Majewski reflects: 'As Superhost, I was given physical and artistic space, freedom

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and trust to do my work.’ This transversal way of working across roles and departments laid the groundwork for a dynamic project that could evolve and respond to new encounters as they emerged.

AN EVOLVING INSTALLATION AS A LIVING SPACE

Majewski and Freisler created an evolving installation on the museum’s top floor that completely transformed during the year-long collaboration, coordinated by project manager Lode Geens. Across three moments – each linked to a different thematic focus – the installation was reconfigured with new artworks, films, documents and books, while remaining flexible throughout. Freisler’s intricately carved apples and Majewski’s still lifes of rare apple varieties served as the installation’s constant elements.

The first iteration of the exhibition placed the apple at the centre as a cultural and symbolic object. The installation included selected works from the МНКА collection, including pieces by Chantal Akerman, Jimmie Durham and Ian Hamilton Finlay. In the second iteration, the space was transformed into a small version of the Alma Museum – literally the ‘Apple Museum’ – in Almaty, the capital of Kazakhstan. Objects from this small but remarkable museum, located in the apple’s region of origin, were brought to Antwerp. The exhibition also featured *Pomology* (2019–21) by Antwerp-based artist Joris De Rycke, who maps spontaneously grown apple trees – sprouting from discarded cores – across the city, documenting each new, unnamed variety: ‘As these trees don’t belong to any commercial variety (which are all genetic clones), I started collecting and cloning them as my own varieties, named after the places where I found them.’

In the third and final iteration, the exhibition turned towards celebrating the harvest. Alongside artworks by Setareh Alipour and Ada Van Hoorebeke, it presented drawings made by children in Thun and Almaty during earlier chapters of the *Apple* project. These were complemented by drawings created by guided groups of children in Antwerp, while families could also make their own drawings at a small drawing station and add them directly to the drawing wall. In this way, the installation grew into a multi-voiced space.

KNOWLEDGE SHARING AS A CONNECTING PRACTICE

The *Apple* project was not just an exhibition: it unfolded as a year of conversations, encounters and shared celebration. With each new phase, the project shifted and was presented anew – not as a finished

work, but as an ongoing process open to dialogue and exchange. The opening in January featured a public conversation between Majewski and Zielińska on the artistic dimensions of the apple.

The opening of the second iteration offered a moment of meaningful international exchange: Alma Museum director Azhar Jandosova was invited to Antwerp, and together with Majewski she spoke with the public about the urgency of protecting Kazakhstan’s wild apple forests, under mounting threat from deforestation. Majewski’s film *The Freedom of Apples* highlighted the struggle of activists working to preserve these forests, home to the *Malus sieversii* – the ancestor of almost all cultivated apples and now endangered. Belgian pomologist Paul Van Laer added further context in a lecture, tracing the global migration of apple varieties and explaining the role of grafting in shaping the history of apple cultivation.

The third iteration of the project took place in autumn – the beginning of the harvest season – and unfolded as a celebration. During the DAKkan festival, a city-wide initiative in which cultural organizations open their rooftops to the public, visitors created a new apple ornament together with Majewski, accompanied by live music performed by an МНКА guide who is also a musician. They took part in a workshop led by Antwerp cider brewers Cider Nations or else enjoyed apple pancakes in the МНКАFE. The gathering illustrated that the project’s strength was social as much as artistic.

FROM ARTISTIC RESEARCH TO URBAN GREENING

As part of *Apple. An Introduction*, Majewski and Freisler introduced a recurring tradition in every city they worked in: the communal planting of apple trees in public spaces. These planting actions brought people together around a shared goal, supporting the greening of urban environments, and helping to create neighbourhoods where quality of life, social cohesion and free access to fruit and vegetables can flourish. In Antwerp, this approach took shape through a collaboration with the nonprofit Plukgeluk, an initiative by food producer and philosopher Dieter Meeuwis and his partner Ivy Smits.

Plukgeluk aims to plant as many apple trees as possible in the city and runs several projects that combine nature and education. At the invitation of МНКА, the organization led grafting workshops for school classes in the museum, during which students grafted around two hundred apple trees. The workshops were filmed by МНКА photographer Christine Clinckx and shown throughout the Superhost

period in M HKAfe, the museum café partially located on the rooftop. The young trees grafted during the workshops were given half a year to grow on the rooftop, and were thus visible to every visitor.

Following the grafting workshops, a planting initiative was set up for schools in and around Antwerp. During the Teachers' Nocturne in March, Plukgeluk offered a short grafting demonstration and gathered candidates to collect their trees in November. Then, on Teachers' Day in November – harvest time – teachers could pick up the young trees to plant at their own schools, receiving them free of charge along with practical tips for planting and care.

Majewski's film *Apple Trees for Cities* documents volunteers, schools and neighbourhood groups planting trees in different urban contexts. Footage from the planting action in the Zuidpark was filmed and edited by Clinckx and later added to the film, which was shown in the final iteration of the exhibition. As Majewski puts it: 'The strength of the project lies in the local – literally by planting together, but also figuratively through exchange with local artists and scientists.'

PARTICIPATION ACROSS GENERATIONS

Young visitors could also take part in a planting action during Children's Art Day, an annual Flemish government initiative in which arts organizations offer creative activities to introduce children to the arts, stimulate participation, and engage them early with artistic practices. M HKA welcomed families to plant apple trees in the Zuidpark, the park adjacent to the museum. This multifunctional park of about eighteen hectares combines green space and recreation, and includes two *samentuinen* – publicly accessible, ecologically managed community gardens where citizens voluntarily grow, harvest, learn and organize together within an open and inclusive structure. Lotte Bode, mediation officer at M HKA, contacted the coordinators of both *samentuinen*, which led to a valuable collaboration: volunteers committed to planting the trees together with visiting families and to caring for them afterwards. The planting action took place during Children's Art Day, alongside apple pétanque, flower bulb modelling and papier-mâché apple crafting.

Participation extended from children and young people in the park to schools across Antwerp, and even to the oldest generation. For more than ten years, M HKA has maintained a long-term collaboration with the care home wzc Immaculata in Edegem, just outside Antwerp. Within this partnership, residents, family members, staff

and volunteers are invited to engage actively with contemporary art. In the context of the *Apple* project, the collaboration deepened further.

M HKA mediation worker Piet Van Hecke and colleagues from the care home invited residents to share their favourite apple recipes – a sensory way to evoke childhood memories. The recipes were written down and prepared together, then compiled into a cookbook with photographs that was given to the residents and sold in both the museum and care home shops. Through this shared activity, the project became a means to activate memory and social connection.

GROWING A MUSEUM DIFFERENTLY

This project shows how art can set an institution in motion without a predetermined plan – not through strategy or policy, but through shared time, attention and imagination. Through collaboration and experimentation, and by allowing things to unfold organically, a different way of working emerges – one that transforms both the museum and the city. The *Apple* project by Majewski and Freisler at M HKA demonstrates how an artistic practice can cultivate relationships that reach far beyond the exhibition space, connecting schools, nonprofit organizations, municipal services, parks, neighbourhood organizations and care institutions. The ecological transition of a museum appears here not as a top-down process, but as a network of small gestures that strengthen one another and generate new connections. Let us continue to nurture this growth – and celebrate the harvest together.

This text includes excerpts and quotations from website texts on the Apple project, written by Antje Majewski, Joanna Zielińska and Cédric Raskin, and on the Zuiderdaken project, written by Karen Werkhoven.

INTRODUCTION

In this chapter I take a closer look at what the notions of ecologizing and sustainability mean in EU-funded cultural and artistic projects – how they are defined and measured, and how they impact the way that projects are constructed, implemented and evaluated. For many years, the L'Internationale confederation has operated and realized its projects and activities with the support of European Union funds, through the 'Creative Europe' programme. Our current four-year project 'Museum of the Commons: Towards a Healthier Art Ecosystem' began in February 2023 and will continue until February 2027. Within the project's framework, we consider the 'healthy art ecosystem' in the context of both local connections and global challenges, with climate change being one of three key thematic strands. As part of our activities, we have collectively learnt how to ecologize our institutions and organizations, and have experimented with various ways of implementing sustainability into creative, artistic and cultural practice – both in accordance with EU definitions and indicators, and beyond them. This experience allows me to reconsider how European projects approach questions of the environment, climate and ecology, critically analyse how effective they are, and explore approaches that might be better suited to the needs, expectations, responsibility and agency of the field of culture and art.

MOBILITY AND EMISSIONS: THE MODEL NEEDS TO CHANGE

European Commission guidelines on sustainability, present in the 'Creative Europe' programmes and other European projects, increasingly point to the need to limit emissions, encourage responsible mobility and manage resources consciously. Even if they do not always take the form of rigid CO₂ limits, they set a direction: projects should be not only based on international circulation but also environmentally responsible. Ignoring this context while undertaking cultural projects is no longer neutral; it shows a lack of reflection on the real conditions in which European culture operates, and disregard for the climate crisis that we are facing.

At the same time, international artistic projects are based on circulation and mobility. Meetings, international projects, collaborative work, presence in diverse contexts and peer-to-peer learning cannot be completely replaced by remote tools. The tension between circulation and emissions reduction is real. Neither a defensive rejection of the guidelines nor superficial greenwashing will resolve it.

Many of L'Internationale's projects and discussions focus on ecological self-reflection, the thematic thread of climate and the responsibility of cultural institutions in relation to the climate crisis. As part of a series of meetings and seminars, we have talked extensively about the tension between ecological responsibility and the need for direct contact, learning on site from colleagues in other institutions, and travel, which cannot be completely abandoned. Among other things, we have discussed changes that could be introduced in international projects. It is important to note that the art field is responsible for only a small fraction of emissions and pollution, incomparable to the scale of emissions produced by the coal extraction industry or heavy industry. (For context, the global art sector is estimated to generate around seventy million tonnes of CO₂ annually, compared to roughly 3.7 billion tonnes produced each year by the steel industry alone.²⁴) Therefore, after many discussions with colleagues from cultural institutions, I dare to say that reducing CO₂ emissions is important, but it is not the most important priority on the agenda of cultural institutions. What is essential is using the resources we have in a responsible way – above all visibility, access to a broad public, public trust, and art as a social space for dialogue, learning and experiencing emotions. Reducing emissions within institutions, implementing green energy solutions and the recycling of resources constitute the obvious and ethical foundation on which we can build further. For this reason, our discussions focus primarily on these substantive aspects rather than on measurable indicators.

The most obvious change concerns moving away from mobility for mobility's sake. For years, the cultural sector functioned with a logic of intensity: short visits, numerous festivals, rapid co-productions across many countries. This model was rewarded with visibility and funding. Today, it is becoming unsustainable. The answer is not to abandon exchange, but to redesign it: fewer, longer trips and stays,

24 See Catherine Bottrill and Alison Tickell, 'The Art of Zero', Julie's Bicycle, 2021, <https://juliesbicycle.org/wp-content/uploads/2026/02/ARTOFZEROv2.pdf>.

But is the goal to restrict access to culture? The ways we engage with cultural experiences and cultural tourism require thorough rethinking. Rather than calibrating the existing model, it may be necessary to consider its transformation: strengthening relationships with local communities, developing long-term engagement with audiences, and moving away from the logic of mass cultural tourism. In this sense, the challenge of sustainability is not only about managing emissions but about reimagining the cultural institution's place within the social and ecological landscape.

SOCIAL ECOLOGY: WITHOUT STABILITY, THERE IS NO SUSTAINABILITY

The debate on emissions and its indicators is necessary but insufficient. The cultural sector largely operates under precarious conditions: short-term grants, lack of income stability, project-based work and pressure for continuous visibility. In such a model, mobility for artists and cultural workers becomes a survival strategy. The 'economy of festival flights' does not stem from a lack of climate awareness, but from a system that rewards scale and intensity. Every project must be bigger, more international and more competitive. In this logic, limiting travel or productions without changing the structural conditions of funding means shifting responsibility onto individuals. If the European Commission wants real change, it must create space for long-term commitment and stability.

Funding schemes and programmes like 'Creative Europe' could more clearly reward long-term collaborations instead of one-off partnerships, the development of local art scenes instead of exclusively transnational exposure, and the building of infrastructure and competencies instead of the production of successive short-lived events. Indicators of success could become the durability of relationships, the continuation of activities after funding ends, and the impact on local communities.

Moreover, EU projects could be a space for testing structural innovations: experimental cultural institutions, small local centres based on co-creation, artistic cooperatives or models increasing the social security of artists and cultural workers, from insurance systems to pilot solutions like basic income. Environmental and social ecology are interconnected: stability favours responsibility.

BEYOND THE EMISSIONS INDICATORS: THE ROLE OF CULTURE IN A TIME OF CRISIS

As emphasized earlier, cultural institutions should measure and reduce their environmental footprint – through energy use, transport and

deeper collaboration, and actions rooted in regions rather than moving around to accumulate geographic presence. As Peter Victor points out, we need to go 'slower by design, not by disaster'.²⁵

A real hierarchy of decisions is also needed: local solutions first, then low-emission forms of transport and combining activities into a single trip, with flights reserved only where they are justified. Circulation can take a hybrid form: people meet less often, but more intensely; results and knowledge circulate physically or digitally; local teams take responsibility for the development of activities. Mobility needs to cease to be a habit and become a conscious decision.

Simultaneously, the cultural sector needs adequate indicators. The sheer number of trips or estimated emissions do not capture the value of an artistic project. More meaningful is the relationship between environmental cost and the durability of the outcomes: How many partnerships have lasted? What has genuinely remained since the funding ended? Did mobility bring long-term value, or merely momentary visibility?

CULTURAL TOURISM: THE HIDDEN DIMENSION OF EMISSIONS

Discussions about the climate footprint of the cultural sector and other ecological indicators often focus on the mobility of artworks, artists and project teams. Yet a much larger impact comes from emissions linked to cultural tourism. Major museums, biennials and festivals function as key spots within international tourism flows, generating significant transport-related emissions, particularly from air travel. The paradox is that cultural institutions themselves usually produce a relatively small operational carbon footprint, while simultaneously contributing to the mobility of millions of visitors. (As indicated, visitors' travel makes up about 74 percent of the sector's total emissions.²⁶) In this context, the question of sustainability cannot be limited to reducing emissions within institutions themselves. It must also address the broader model through which these institutions operate. Should the goal remain the continuous growth of visitor numbers and international visibility, or is it time to rethink the sustainability indicators and the role of cultural institutions as locally rooted centres of culture, education and collaboration?

25 Peter A. Victor, *Managing without Growth: Slower by Design, Not Disaster*, Cheltenham: Edward Elgar, 2008.

26 Thu-Huong Ha, 'The Art World's Big Planetary Problem', CIMAM, 4 January 2024, <https://cimam.org/news-archive/the-art-worlds-big-planetary-problem/>.

production. At the same time, a sense of proportion is necessary. If the sustainability debate in the cultural sector focuses mainly on CO₂ mitigation, it risks overlooking the sector's most important role. Art institutions are social spaces where meanings, narratives and collective imagination are shaped. Through exhibitions, public programmes and artistic practices, they help translate scientific knowledge about the climate crisis into images, stories and experiences that people can understand and relate to. In this way, culture makes complex environmental issues socially visible and emotionally tangible.

Cultural institutions can act as platforms connecting different forms of knowledge. By bringing together artists, scientists, activists and communities, they create spaces for dialogue about environmental change and its local implications. Through education and collaboration, they can strengthen ecological awareness and a sense of shared responsibility.

For this reason, the cultural sector's most significant contribution to climate transformation may not lie only in reducing its own emissions, but in shaping how societies understand the crisis and imagine possible futures. This, however, raises a further question: whether such cultural and social impacts can be measured at all, and, if so, how and to what extent it is meaningful to do so.

CONCLUSION

Sustainability in 'Creative Europe' projects should not be limited to an environmental checklist. It should mean the conscious redesign of mobility, the strengthening of the sector's stability and the use of the institutions' potential as actors in social transformation. Only the combination of these three dimensions allows us to speak of real change, instead of ticking boxes.

AUTHORS

NICK AIKENS

is a curator, researcher, editor and educator. He is the managing editor and research lead for L'Internationale Online. He assumed his role in August 2023 as part of the four-year EU-funded project 'Museum of the Commons'. Nick has a PhD from HDK-Valand, part of Gothenburg University and academic partner of L'Internationale. He was previously curator at the Van Abbemuseum (2012–23), where he worked on numerous exhibitions and publications and led the research programme 'Deviant Practice' (2016–19). He has been a tutor and course leader at the Dutch Art Institute in Arnhem (2012–19) and a guest professor in the Department of Exhibitions and Scenography at Karlsruhe University (2023–24).

EMIRHAN ALTUNER

is the spatial design and production manager at Salt. Holding both bachelor's and master's degrees from the Istanbul Technical University (İTÜ) Faculty of Architecture, Altuner has been actively involved in the exhibition design, research and production of Salt's programmes since 2016. Furthermore, he has led the Architectural Drawing studio at the Istanbul Bilgi University Faculty of Architecture since 2023, continuously exploring temporary spaces, scenography, architectural drawing and two- and three-dimensional representations in his work.

LOTTE BODE

is a mediation officer at MHKA, where she develops public programmes, exhibition texts and educational materials. She holds a degree in theatre and film studies and has conducted academic research on the archiving of performance art in a museum context. Alongside this work, she has contributed to various cultural platforms as a cultural journalist.

JAKUB DEPCZYŃSKI

is an art historian, researcher and curator. He holds an MA in art history and theory from the Academy of Fine Arts in Warsaw and currently works at the Museum of Modern Art

in Warsaw as curator of public programmes. In his research he focuses on post-artistic practices, the relationship between technology and art, art in the face of the planetary climate and environmental crisis, and contemporary ecological thought. Jakub is one of the creators of the Atlas of the Anti-Fascist Year, a social archive of anti-fascist and anti-war activities and attitudes in culture, art and other walks of life, as well as a co-founder of the Office for Postartistic Services, 'Sunflower' Solidarity Community Center and the Future Fragments platform.

NATALIA GUAZA

studied art history and obtained a master's degree in cultural management in Vienna before moving to Madrid to work in the Temporary Exhibitions Department at the Museo Nacional Centro de Arte Reina Sofía (MNCARS), where she has developed her professional career for over twenty years, working as head of temporary exhibitions management since 2013. Throughout this time, she has contributed to more than 200 exhibitions and collaborated with some of the most prominent contemporary art museums worldwide. She has frequently managed large-scale and highly complex projects, representing significant professional challenges within her field. In addition to her strong commitment to art and culture, she is also interested in sustainability – particularly the implementation of sustainable practices in the transport and installation of artworks – as well as innovations in museum management processes. During the Covid-19 pandemic, she defined and promoted the implementation of a virtual courier system for temporary exhibitions at MNCARS, which remains in use today due to its clear advantages for each project.

MARIA MALLOL

is a cultural worker and mother of two. She holds a degree in audiovisual communication and a master's in contemporary art and visual culture. She is part of the team of Museo Tentacular, within the Study Directorship of the Museo Nacional Centro de Arte Reina Sofía (MNCARS). Her experience spans the coordination of European cultural cooperation projects, the promotion of performing arts, and the coordination of

film programmes. She has worked at the Centre de Cultura Contemporània de Barcelona, the Van Abbemuseum in Eindhoven and the Teatros del Canal in Madrid.

ANDREA MIGUEL

is a political scientist specializing in peace culture and conflict resolution. She has worked extensively in international accompaniment, community-based initiatives and mediation processes with local communities and human rights defenders in Nepal (2020) and Mexico (2020–22). As head of sustainability at MACBA in Barcelona since 2023, she leads the integration of environmental and social sustainability practices across the museum's departments. In this role, she has developed initiatives such as the Social Council and the Mobile Garden (Jardín Ambulante). Her work focuses on fostering cultural practices that connect individuals and territories while expanding access to cultural rights.

KARL MOUBARAK

is a creative technologist working at the intersection of experimental computation, new media and digital culture in the arts and humanities. His work entails designing and developing software and hardware (such as archive websites, interactive installations and livestream platforms), conducting research intersecting computational infrastructure with socio-political paradigms (such as trans*feminism, anti-colonialism and climate justice) and facilitating socially engaging cultural projects (such as educational workshops, guided software tours and summer camps). He is an active member of Amsterdam-based workshop cooperative Hackers & Designers (since 2019), which develops hybrid publishing tools, explores collaborative methodologies and experiments with workshoping as a format for exchange. He is also involved with Eindhoven-based interstitial collective body the Office of Queer Affairs (since 2017), which explores the involvement of the local queer community in the museum's curatorial practices.

JOANNA MURZYN

is a consultant, initiator of the Digital Ecology Institute and designer of climate-beneficial technological solutions.

A philosopher by training, she has worked for organizations such as UNESCO, Deloitte, PARP and IKEA. In alignment with the principles of digital ecology, she does not maintain a social media presence.

ARGYRI PLATSA

is the exhibition production coordinator at the Museum of Contemporary Art Antwerp (M HKA). She holds a PhD in history and transmission of cultural heritage from the Università degli studi della Campania.

CAMINO PRIETO CADENAS

is a museum professional with a bachelor's degree in history (Universidad Complutense de Madrid) and a master's degree in museum studies (heritage studies) (Universiteit van Amsterdam). She has been a member of the Cuerpo Facultativo de Conservadores de Museos del Estado since 2022. In 2023, she joined the Exhibitions Department at the Museo Nacional Centro de Arte Reina Sofía (MNCARS), initially as a registrar, and currently works there as an exhibition coordinator. She has contributed to a wide range of projects in collaboration with artists as well as leading museums and institutions worldwide. Previously, she worked at the Ny Carlsberg Glyptotek in Copenhagen and as a cultural manager and art mediator in Madrid, collaborating with institutions such as the Museo del Traje and Sala Alcalá 31.

ANA ŠKEGRO

is a senior curator currently working as head of the Experimental and Research Department and head of the Media Art Collection at the Museum of Contemporary Art in Zagreb (MSU). She has worked as a curator, producer and project manager on various cultural and community projects since 2013. From 2017 to 2021 she was curator of international projects and head of the Education Department at the MSU. She has (co-)curated numerous exhibitions, including most recently 'The Visible Ones' (2023–25), 'The Smell of Freshly Chopped Wood' (2024–25) and 'Jan St. Werner: Vibraception – Investigations in Wavespace' (2024–25).

is an art historian, researcher and curator. She holds master's degrees in art history and theory from the Academy of Fine Arts in Warsaw and political ecology, degrowth and environmental justice from the Autonomous University in Barcelona. Bogna currently works in the Research Department at the Museum of Modern Art in Warsaw and is the coordinator of the international project 'Museum of the Commons', realized by the confederation of art museums and cultural organizations L'Internationale. In her research work she is concerned with rewriting the canon of artistic and activist actions towards the climate crisis as well as ecofeminist art.

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EDITORS

Jakub Depczyński, Bogna Stefańska

COPY EDITOR

Bill Roberts

GRAPHIC DESIGN

Martyna Wyrzykowska

GENERAL COORDINATOR

Museum of Modern Art in Warsaw

PROJECT LEADER

L'Internationale

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DOING IT WITH OTHERS: A FIELD REPORT FROM OUR STRUGGLE TO ECOLOGIZE ART INSTITUTIONS



How can art institutions move beyond theory to take real action in the face of the climate crisis? This publication is a candid field report from a three-year collective struggle to ecologize the arts. Stemming from the L'Internationale confederation's 'Museum of the Commons' project, this book shares first-hand stories of successes, failures, and the inevitable frictions encountered when implementing sustainability in practice. From rethinking global art transport and pioneering virtual couriers to designing eco-conscious digital platforms and building urban energy communities, these case studies offer a transparent look at the limits and potential of institutional change. Whether you are a museum director, a curator, or an independent artist, the message is clear: you have the power to transform the ecosystem – but you must do it with others.

WITH CONTRIBUTIONS BY:

Nick Aikens, Emirhan Altuner, Lotte Bode, Jakub Depczyński, Natalia Guaza, Maria Mallol, Andrea Miguel, Karl Moubarak, Argyri Platsa, Camino Prieto Cadenas, Ana Škegro, Bogna Stefańska

EDITORS:

Jakub Depczyński, Bogna Stefańska