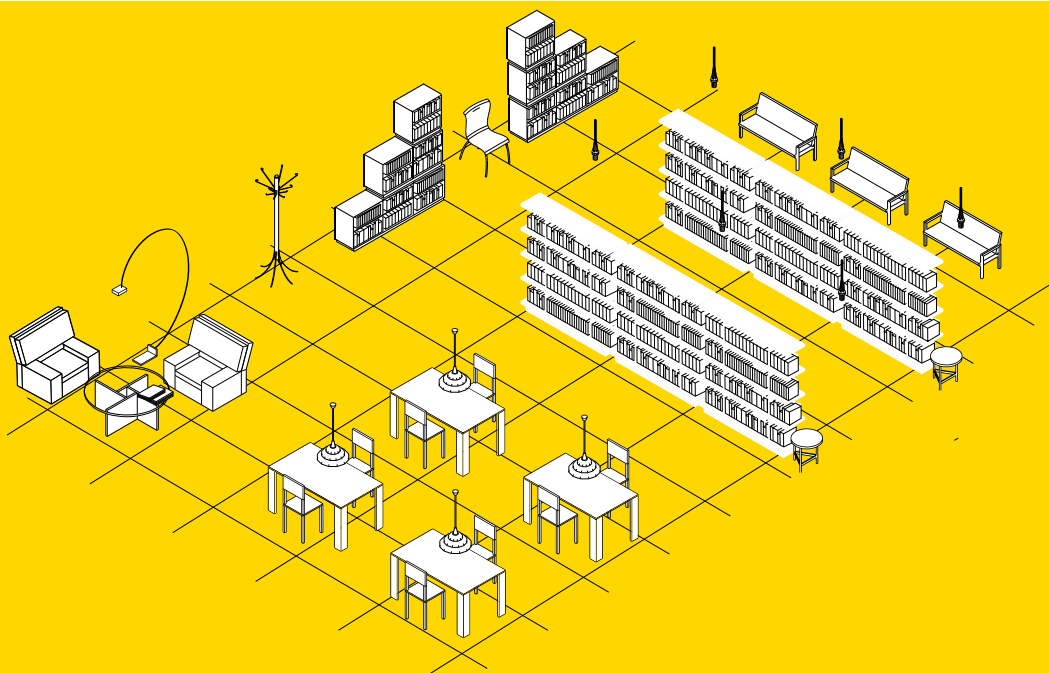


Towards the figure of the eco-exhibition designer

Editors
Davide Crippa
Barbara Di Prete



EDIZIONI
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The text underwent double-blind peer review, in accordance with the criteria defined for publication in the Series

ISBN 978-88-3294-254-5

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The work is published in a digital E-Book version only ISBN 978-88-3294-254-5

Copies of this limited edition were produced for the exclusive use of the Authors. The publication is not commercially available in the print version.

Series under the patronage of:



Project funded by the European Union - Next Generation EU - PNRR
Transizione Digitale Organismi Culturali e Creativi

Graphics and layout:
Riccardo Palomba

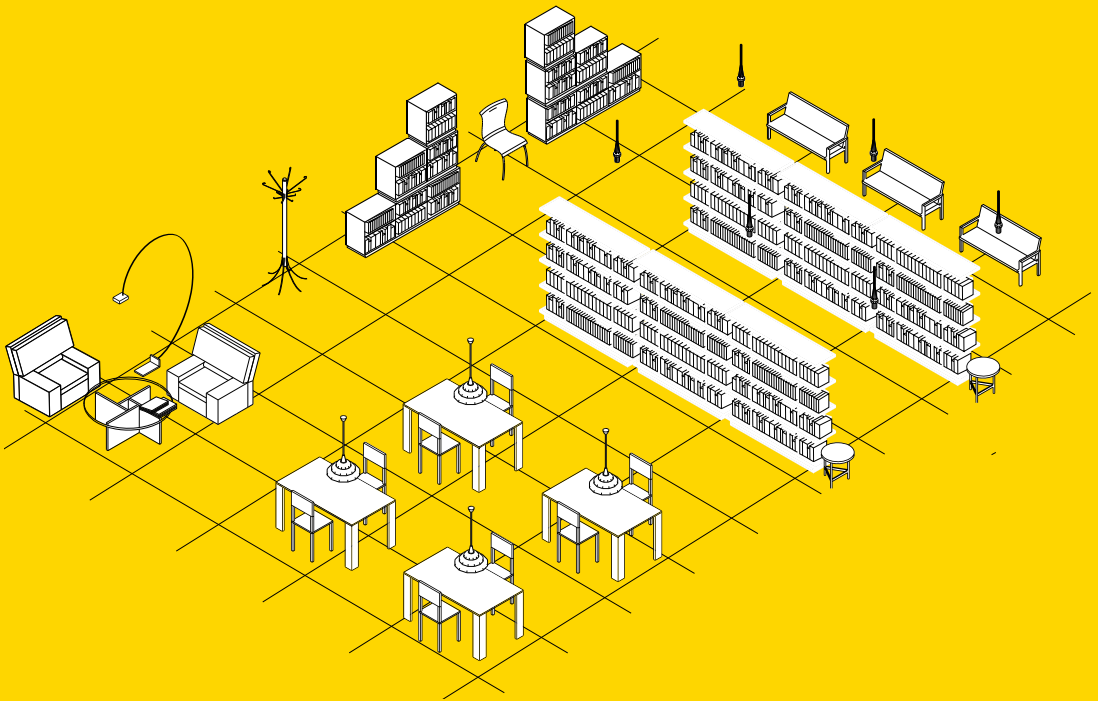
In collaboration with ICOM Italia



Research funded through the Public Notice for the submission of project proposals for capacity building for cultural operators, within the framework of the PNRR, Mission 1 – Digitalization, Innovation, Competitiveness, Culture and Tourism, COMPONENT 3 – Tourism and Culture 4.0, MEASURE 3 – Cultural and Creative Industries, INVESTMENT 3.3 – “Capacity building for cultural operators to manage the digital and green transition,” Sub-investment 3.3.3 – “Promoting the reduction of the ecological footprint of cultural events by encouraging the inclusion of social and environmental criteria in public procurement policies, thus guiding the supply chain towards the eco-innovation of products and services” (Action B I), funded by the European Union – NextGenerationEU and managed by the Ministry of Culture.

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Reflections for drafting the CAM Allestimenti

*A legacy of the first conference on sustainable exhibit
promoted by the NSBVN Cluster*

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Fig. 31. Barbara Di Prete presents the guidelines of the NSBVN Editorial Series.
Photo: ClusterNSBVN_Iuav.

Reflections for drafting the CAM Allestimenti

A legacy of the first conference on sustainable exhibit promoted by the NSBVN Cluster

The exhibit sector—comprising fairs, exhibitions, and temporary events—has a significant environmental impact due to the short lifespan of installations, the use of materials that are often non-sustainable, and the high CO₂ emissions linked to lighting, air conditioning, and transportation. Added to these environmental concerns are the regulatory challenges posed by the Criteri Ambientali Minimi (CAM, Criteri Minimi Ambientali), which, although mandatory for public administrations, remain difficult to apply effectively. The criteria are not always clear, and when adapted to the specificities of temporary installations, they often result in forced interpretations and regulatory gaps.

To address this pressing issue, a number of academic initiatives—while rooted in research—are increasingly engaging a broader range of stakeholders, including industry professionals, exhibition contractors, and trade fair and museum operators. Among these, the NSBVN – Sustainable Exhibit Cluster¹, promoted by Università Iuav di Venezia, together with the projects funded under the TOCC² program and inter-university collaborations such as the Places+³ research group at the Politecnico di Milano, is developing innovative, circular-economy-based strategies for more sustainable exhibition design. These projects aim to devise methods and practices that mitigate the environmental impact of installations, raise awareness among both professionals and the public, and promote an update



Fig. 32. One of the working tables during the First NSBVN – Sustainable Exhibit Cluster Conference. Photo: ClusterNSBVN_Iuav.

to current regulations to make the entire temporary events supply chain more sustainable.

Within this research framework, the focus is on the work of the NSBVN – Sustainable Exhibit Cluster, particularly the national conference of the same name and the subsequent working groups⁴. Both have served as key opportunities to convene Italy's leading figures in the exhibition sector to discuss the gaps in existing regulations and, in the short term, draft supplementary guidelines to propose to the Ministry for Ecological Transition, aimed at better regulating installation processes and reducing their ecological footprint.

CAM Eventi: Towards a Cultural and Regulatory Shift

The need for a new legislative framework to regulate the exhibition sector was also addressed in the recent Regulation (EU) 2024/1781 of the European Parliament and of the Council (13 June 2024), which defines eco-design requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542, and repealing Directive 2009/125/EC.

This regulation forms part of the broader context of the European Green Deal

and the Circular Economy Action Plan, with the aim of ensuring that products placed on the EU market are increasingly sustainable, energy-efficient, and designed for a second life, thus reducing their environmental impact (European Parliament and Council of the European Union, 2024). Among the key criteria identified by the Commission are product durability, reparability, and recyclability.

However, these directives do not yet constitute a cohesive regulatory framework for the exhibition sector. When it comes to regulating production processes, material selection, logistics management, and the organization and execution of installations, the main regulatory reference remains the CAM Eventi (2022).

These *Criteri Minimi Ambientali* for Events represent an important set of guidelines for organizing events in a more sustainable and environmentally responsible way, aiming to minimize their impact and encourage the responsible use of resources. Yet, due to the sector's heterogeneity and the difficulty of addressing the specific decision-making and design processes within each supply chain, these objectives remain highly ambitious and, for now, largely unmet.

The philosophy underpinning the CAM is to limit waste and unnecessary consumption by adopting reversible and replicable solutions. Priority is generally given to recycled or reusable materials that can be employed across multiple contexts, entail low transportation costs, or utilize shared storage solutions. For catering, the guidelines encourage the use of organic, local, and seasonal foods; for waste management, organizers are prompted to promote recycling; for logistics, they are urged to favor sustainable mobility options—short-distance or low-emission transport systems. However, when it comes to the design and installation of exhibition spaces, specific prescriptions are still lacking.

It is particularly noteworthy that the CAM do not limit themselves to the “care” of the environment but also embrace a social and ethical vision of design, following the principles of Universal Design (Mace, 1997; Fortuna et al., 2023) to ensure accessibility and inclusivity for all. Another crucial point emerging from the analysis is the promotion of circular economy practices—not merely as a long-term aspiration but as a concrete operational anchor. Among the recommended strategies is Design for Disassembly (Rios et al., 2015; Toniolo et al., 2021), which facilitates the reuse and recycling of installations.

As mentioned, the CAM apply to a wide range of events—from cultural to sporting and entertainment ones—encompassing various types of exhibitions, fairs, and performances. Precisely because of this broad scope and the inherent complexity of each type of event, the CAM can only become truly operational tools

if they are further refined to address specific contexts, constraints, and challenges. While much remains to be done, the fact that compliance with these criteria is already mandatory for public administrations and integrated into public procurement procedures marks a significant step forward in terms of awareness, education, and the adoption of more virtuous practices.

At present, therefore, rather than serving primarily as a binding legal framework, the CAM represent a valuable cultural opportunity to foster a shift towards sustainability—one capable of leaving a lasting, positive legacy for communities and territories alike.

CAM Allestimenti: Challenges and Opportunities

At the conclusion of the First NSBVN – Sustainable Exhibit Conference, the namesake Cluster organized three focus groups specifically dedicated to the regulatory framework governing the sector. The first meeting, held in person immediately after the conference, provided an opportunity to establish a multi-stakeholder dialogue among representatives from the museum, trade fair, design, and exhibition industries, as well as the academic world. The session proved hi-



Fig. 33. First meeting of the NSBVN Focus Group – CAM Exhibition Design, 25 July 2024. Photo: ClusterNSBVN_Iuav.

ghly stimulating, and all participants emphasized both the need and willingness to further explore the subject through additional dedicated meetings. These subsequent discussions took place in July and October 2024 in a blended format (online and in-person).

Other professionals from the exhibition field later joined these follow-up sessions, as it was deemed essential to involve representatives from all stages of the exhibition process in order to enrich the dialogue and encourage as comprehensive and articulated an exchange of experiences as possible⁵.

A Critical Overview: Where to Start?

The analysis of current legislation on eco-design and CAM Eventi revealed numerous gaps and unresolved issues in a field facing significant challenges. The following summarizes the main critical aspects that emerged from the focus groups:

a. Limited relevance of exhibition-related issues: The first major concern, already identified in previous discussions, relates to the low relevance of exhibition and spatial themes within the CAM Eventi: out of the 23 stated criteria, only three directly concern exhibition design. This limited attention suggests that the field is considered marginally impactful. However, exhibition processes involve large quantities of material, significant logistical operations, and long-distance transport, resulting in considerable economic and environmental costs. Moreover, without proper planning, exhibitions can leave behind substantial waste. Giving the same regulatory weight to an entire exhibition process as to catering materials (e.g., tablecloths, cutlery, napkins) is, therefore, a naïve—if not risky—imbalance for a framework that aspires to be comprehensive.

b. A generalist approach: The CAM apply to multiple product categories, resulting in a generalist orientation that allows for wide interpretation—especially in exhibition design, which by nature involves extremely diverse production chains and differs significantly depending on site-specific contexts.

c. Poor alignment with real working conditions: The broad scope of the CAM comes at the cost of precision: the criteria are often perceived as overly theoretical and detached from professional practice. In the design phase, it becomes difficult to define commitments that reflect actual working conditions, making practical implementation inconsistent.

d. Lack of reference models: Due to the absence of prior experience, codified models, or dedicated literature, evaluation parameters for assessing the environmental impact of an exhibition remain unclear. This lack of benchmarks makes both interpretation and application challenging—unlike other fields (such as food and

beverage) that have developed long-standing, stratified regulations, which are easier to understand and apply.

e. Lack of private-sector responsibility: Currently, CAM compliance is mandatory only for public administrations, not for private entities. This creates market disparities and hinders the widespread adoption of a sustainability culture. Partial public–private entities, such as foundations or trade fair organizers, can often bypass compliance altogether. As a result, this tool has yet to achieve systematic implementation.

f. Absence of monitoring mechanisms: Implementing CAM requires not only careful planning but also rigorous verification to ensure that declared commitments are actually met. Such commitments should be articulated during the design phase through accessible and transparent tools, rather than via highly technical documentation that clients rarely understand. Likewise, on-site inspections and supervision are necessary to promote real accountability through collaborative oversight between public authorities, clients, and industry professionals.

g. Need for training and accountability: Closely linked to the previous point is a lack of dedicated training. In theory, responsibility for CAM compliance lies with the owner of the space (not the event organizer). When the owner is a public body, it is therefore the administration's duty to ensure compliance. However, there is often no adequately trained personnel to perform such checks. In most cases, compliance is verified only through self-certification by the contractor, a system that shifts responsibility and offers no real guarantee of results.

h. Building professional competence: A related and equally significant issue concerns internal expertise within companies. Certain CAM requirements—such as the calculation of carbon footprint—require costly software and specific technical knowledge that many firms lack. This additional demand for skills and resources further complicates implementation and highlights the need for training programs to support the sustainability transition.

i. Short-term planning: In addition to cultural and regulatory issues, economic and organizational constraints hinder the long-term sustainability of exhibition practices. Unlike in the past, when companies could rely on three-year budgets allowing for flexible and sustainable management, today most operate with annual budgets and plan short-term installations. This severely limits the possibility of reusing designs in different contexts, reducing opportunities to integrate sustainable practices.

l. Towards a deeper culture of sustainability: Finally—and perhaps most importantly—the main obstacle remains the lack of awareness among clients and the

broader industry. Despite some progress, a genuine culture of reuse is still largely absent. Often, at the client's own request, installations are used only once and then discarded. This attitude is rooted in an aesthetic culture that values novelty, perceiving reused materials as less appealing or even detrimental to brand image. Recycling is also resisted because many companies demand custom-built, brand-specific designs, rejecting the idea of sharing or reusing components provided by trade fair organizers.

A Design-Oriented Perspective: Where Do We Want to Go?

Over the course of the discussions on the CAM Eventi, the need emerged to draft a dedicated CAM Exhibition Design (CAM Allestimenti), expanding and deepening certain points already present in the current regulation while tailoring them more closely to exhibition-specific requirements. It was therefore proposed to prepare a supplementary framework that would address the sector's needs with a more vertical, targeted document.

In order to structure such a document comprehensively—taking into account all phases that characterize the design process, from the selection/availability of materials to the management of logistics, transport, and possible storage; from scheduling to the calculation of environmental impact and the structuring of the network of actors involved; from production through on-site installation, and from disassembly to end-of-life planning—the meetings were organized around a series of programming, design, and production parameters, grouped into operational macro-categories (see Table 6).

What follows are reflections shared in the working groups, intended to constitute an initial corpus of meta-design guidelines for a future CAM Exhibition Design.

a. The “right” timelines for sustainable installations: the first key aspect concerns the management of design and execution timelines, a crucial node for the sustainability of installations. Especially in the trade-fair context, there is often an imbalance between commercial activities—which begin well in advance—versus the design and production of the installation (compressed into a few months, if not a few weeks before the event) and the installation/disassembly phases, to which only a few days are allotted. Such compressed timelines create a precarious condition for the contractor, often leading to the use of pre-assembled materials that are less sustainable but more cost-effective. Many events impose rigid deadlines for dismantling, forcing operators to destroy artifacts that could otherwise be reused if properly taken down. Proper scheduling should therefore adopt a systemic view of the project, allocating adequate time to production and installation

Parameters for the Management and Coordination of an Exhibition Setup	Strategic Aspects (Phases of the Exhibition Cycle)	Impact Calculation (KPIs and Tools/Actions)	Actors Involved
Programming (Time): Advance space allocation Biennial/triennial trade fair installations Misalignment between commercial activity / design / production / installation timelines (<i>Short times prevent full optimization of logistics and design processes. e.g., 9 commercial months, 3 months for everything else, 5 days for installation</i>) Design (Production Phase): Everything that is done is paid for by the exhibitor. There is difficulty between trade fair districts and organizers in communicating additional costs in favor of sustainability. Every design choice affects the cost per square meter (+ cost = - area). There are general technical guidelines issued by fairs to leave exhibitors some freedom. <i>Fairs are now working on creating new guidelines (e.g., banning plasterboard unless recovery methods after use are clearly declared).</i> The need for beautiful, impactful installations often clashes with the timing and requirements of environmental criteria. A collective effort is required to align all stakeholders.	Choice of materials: CURRENT SITUATION: Consult existing academic research archives on eco-materials.	Characteristics? (<i>Mono-material / Multi-material</i>)	Organizer / Manager
	Logistics / Transport: CURRENT SITUATION: Who and what is transported is often uncontrollable, since routes are sub-contracted. NEED: Rationalization of movements. QUESTION: Would building loyalty with logistics companies help achieve greater control?	Ease of transport? (<i>Weight / Dimensions</i>) Emissions? (<i>Distances to cover</i>) →Carbon Calculator →Global Footprint Network	Client / Exhibitor
	Installation (Implementation Phase): CURRENT SITUATION: Modular systems differ from pre-fitted ones (the latter being contracts with the trade fair organizer). NEED: Provide designers with tools to foster a systemic vision. QUESTION: How can the scenic/visual impact of installations be reconciled with sustainability? CURRENT SITUATION: Advantages and disadvantages of parametric systems - a balance must be found between personalization and modularity. NEED: Personalization that reflects the exhibitor's and the fair's identity. QUESTION: How can customization be guaranteed?	Ease of Assembly / Disassembly? (<i>Number of components / Number of different materials / Disassembly possibility</i>) →Decentralized construction (on site). →Study of parametrically modeled components to provide to designers. →Research projects on parametric prototypes for trade fair installations. →Installations using aluminum and fabric systems with take-back schemes for storage by the manufacturer.	Designer
			Service Provider
Culture Horizontal, humanistic approach—not just technical. Technical limits often make professionals feel restricted in choices and possibilities. It's a matter of culture and awareness. Each actor should take responsibility, without limiting creativity and design freedom, as long as process criteria are respected. Can the Cluster promote this topic through cultural tools (e.g., competitions)? Goal: Develop process-oriented criteria.	End-of-Life Management: CURRENT SITUATION: Reuse practices are still perceived as fragile if not shared. NEED: Different logics between museums (custom, rarely reused) and fairs (reuse easier and frequent for economic reasons). Storage is a problem. QUESTION: Define standardized, modular but flexible construction systems?	Reuse? (<i>Number of possible reuses: how many cycles it can withstand</i>) Storage? (<i>Volume / Storage costs</i>)	Contractor
	Social Responsibility: CURRENT SITUATION: Focus is solely on economic sustainability. NEED: Training and skills-building for public employees. QUESTION: How can clients be made aware or "educated"?	Social Impact? →Present data clearly (raise awareness)	Reuse actors
			Visitor

Tab 6. Strategic themes emerged during the focus group, structured around the phases of programming, design, production, implementation, and management of an exhibition.

and thus avoiding improvised decisions that undermine sustainability.

b. Towards systemic design: equally crucial is the role of design—on the client-consultant side as well as the contractor’s technical side—called upon to collaborate synergistically rather than, as sometimes happens, conflictually. Design must concern not only the formal and communicative output of the installation, but also the selection of the most suitable materials, coordination of assembly, and—last but often overlooked—the supervision of proper disassembly. A programmed systemic approach—capable of accommodating in the project the materials’ life cycle, second life of components, or their proper disposal—is fundamental to reducing the economic–environmental impact of the installation.

c. Sustainability data as communicable and certifiable requirements: alongside the responsibilities of designers and contractors, it is essential to invest in client training and in better communicating the sustainability values embedded in projects. Over-optimizing an installation can appear disadvantageous to a client who, lacking adequate awareness, may choose the cheapest or most easily customized option rather than the most sustainable one. The transition towards more ecological choices should therefore be accompanied by an objectifiable communication and information framework based on reliable, comparable data: the aim is to build a shared set of parameters that industry professionals can convey as project data on par with cost, duration, finish characteristics, fire resistance, etc. This is not about “educating” the client so much as demonstrating the economic convenience of ecologically sound choices; to that end, the support of third parties such as universities—able to certify and guarantee the reliability of proposed solutions—appears essential.

d. The value of creativity and innovation: on the design front, beyond technical knowledge and scheduling capability, training can encourage designers to interpret production scraps as creative, sustainable opportunities rather than as mere (and useless) residues. It follows that investing in research and development—reimagining the aesthetic potential inherent in recycling and reuse—becomes important, with the involvement of start-ups and small firms already proposing innovative solutions. In this vein, consider the experiments by Social Factory which, for Gruppo CAP (the integrated water-service operator for the City of Milan) at the “Ecomondo” trade fair in Rimini (2021), outfitted the entire pavilion with production scraps, valorizing negatives from milled sheets to create furnishings and other spatial components.

Furthermore, the fair presented the first research conducted by the company with the Politecnico di Milano⁶ on new materials produced with experimental



Fig. 34. Furniture designed for the setup of the CAP Group stand at Eco-mondo 2021.

Photo: ClusterNSBVN_Iuav.

techniques by recycling waste with no source separation (plastics “contaminated” with aluminum, paper, and other residues typically found in food packaging). These panels—exhibited to date for demonstration in various shows—have strength suitable for use in furniture and cladding; they are of great interest because they signal the company’s sensitivity to ecological issues while also carrying strong narrative and aesthetic value, as their material “imperfections” simulate the veining of fine marbles. The intention is to propose them in future stands as research directly applied to exhibition artifacts.

e. Parametric exhibition solutions between standardization and customization: given the need to mediate between production requirements and brand-representation needs, there is an opportunity to valorize modular and modifiable construction systems that allow flexibility in the form, size, and repetition of installations while also ensuring a distinctive creative signature and recognizability of the exhibition artifact. In this perspective, parametric solutions are recommended, making individual project elements more easily manageable according to the client brief and enabling more effective responses to their needs.

A concrete example of this approach is the pavilion assembled by Mate-rieunite at “CPHI Barcelona 2023”

(Materieunite, 2023), designed using a parametric construction system in fire-retardant honeycomb cardboard. The client, operating in the pharmaceutical sector, had historically used “single-use” stands, without considering reuse as a worthwhile option. However, after being presented with a report including an economic and environmental analysis—highlighting the advantages of reusing the installation the following year—the client, faced with objective data, was convinced of the choice (underscoring the importance of “accompanying” clients towards a culture of sustainability). The following year the stand was expanded by 50% (from 108 m² to 153 m²): approximately 70% of the installation was reused, retaining the structure, furnishings, and walls. This substantial reuse yielded significant cost savings and a clear reduction in resource waste. Another noteworthy feature concerns the volume of stored material once the stand is disassembled: all panels can be folded onto themselves and compacted, occupying minimal space, with obvious benefits for both transport and storage. This (highly customizable) installation can therefore be considered a best practice within a systemic vision in which production, logistics, assembly, and warehousing are designed upstream, consciously.

f. Codifying suitable tools and methods for impact assessment: it would be de-



Fig. 35. MILANO CIRCOLARE – The City that Reduces, Recovers and Recycles, BASE Milano, 2023; Design Differente, Salone del Mobile. Photo: ClusterNSBVN_Iuav.

sirable—and necessary—to identify a shared tool to analyze an installation’s life cycle and calculate its CO₂ impact. Unfortunately, this goal remains elusive: assessing the environmental impact of an installation is still extremely complex, and the identification of a definitive, accessible, universal calculation model appears distant. While it is simpler to trace the chain for mono-materials, more complex installations require consideration of each material’s life cycle and integration with data relating to the entire installation process. Moreover, the international logistics of installations can make their environmental impact even more significant (and more complex to estimate).

A virtuous example of evaluation was proposed in the “Generative Circularity” installation at Fuori Salone 2022 (Materieunite, 2022), which used a model to calculate impact and represented it through a comparative infographic. While not a complete LCA, its simplicity and communicative accessibility make it a good starting point for future developments.

g. A multi-actor system: finally, to ensure coherent, attentive implementation of the points above—pursuing their concrete, applicable translation—it was deemed necessary to specify the individual actors involved in the installation process which, by breadth and complexity, sometimes presents areas of overlap that are



Fig. 36. ICE Pharma Pavilion at CPHI Barcelona 2023, designed and set up by Materieunite. Photo: Materieunite.

unclear in terms of roles and responsibilities. To assign duties and tasks to specific parties, seven main actors were identified (which may also coincide in practice): event promoter/organizer, event manager, exhibitor, contractor, designer, service providers, and “reuse actors”—a term increasingly used to designate all those commercial operators who foster sharing and recycling dynamics (consider, for example, the “NonSiButtaViaNiente.it” sharing platform, which makes exhibition materials from the national museum network available online). For an effective drafting of a CAM Exhibition Design, it is considered useful to structure the document so that prescriptions are divided not only by the macro-distinction between museum and trade-fair exhibits, but also according to this grid of responsibilities.

An appendix note (not a formal point within these suggestions for a future CAM Exhibition Design) underscores the leading role of the public sector. The choice to make CAM a mandatory requirement for public procurement—and a rewarding factor when requesting patronage—is considered appropriate; however, even if the transition towards sustainability can be led by the public sector, the goal is that the private sector will want to (more than merely have to) follow suit.

The Eco-exhibition designer and the Cultural Responsibility of Project.

The discussions undertaken make it clear that new skills and new design processes are needed to reverse the trend of “unsustainability” that permeates the exhibition sector.

This means, first and foremost, building new competences and new professional profiles, with the aim of developing the role of the Eco-exhibition designer (eco-allestitore) capable of steering the transition towards more sustainable exhibition practices. Designers’ responsibility is crucial to ensure that sustainable solutions are not merely seen as feasible options but become priority choices: their skills and sensitivity are essential to achieve a balance between aesthetics and environmental and economic sustainability in a field often marked by challenging timelines.

Fundamental differences must also be underscored between the museum and trade-fair spheres—two domains with distinct operating modes and differing issues and sensitivities regarding reuse and the spread of sustainable practices. In the museum context, reuse is often subject to prior agreements, given the specificity of installations and the presence of curators; conversely, in trade fairs, reuse is

more widespread, both for economic and fiscal reasons and due to the prevalence of turnkey contracts and rental structures. Nevertheless, museums are progressively adopting strategies similar to those of fairs—for example, promoting the circulation of exhibitions through other venues—thus fostering the design of easily demountable installations. The convergence between museum and trade-fair practices offers a valuable opportunity to develop innovative construction and design systems capable of extending the lifecycle of installations without compromising quality. Although significant operational differences remain between the two sectors, this scenario suggests the opportunity for parallel experiments, able to tailor proposed solutions to the specificities of each context.

Finally, it is evident that sustainability in the exhibition realm must be addressed not only from a technical-regulatory perspective but also—if not above all—from a cultural one: the goal of drafting CAM Exhibition Design (CAM Allestimenti) thus becomes a pretext for a broader reflection. On this basis, the Cluster has examined its own role as a tool/platform for promoting wider environmental (and social) awareness, going beyond purely technical criteria and shifting attention towards a broader culture of design as an act that is both responsible and visionary.

A change of perspective is therefore proposed: from *Criteri Minimi Ambientali* to “minimum design criteria”—a slogan that masks a crucial observation. Addressing sustainability as a cultural issue, rather than as a purely technical or engineering topic, represents a fundamental paradigm shift. It is not a linguistic flourish, but primarily an ethical, political, and, ultimately, regulatory matter.

In summary, the coordinated working groups—and this essay, which reports their outcomes—aim to trigger process innovations, codify replicable and measurable practices and methods, move beyond the limitations of current operating procedures, and lay the groundwork for future guidelines that more closely match working realities and can involve both public and private stakeholders in a challenge that must, by necessity, be collective: bringing about a significant system-level change capable of supporting a sustainable transition in which design plays a key role.

The success of this transition will depend on our ability to establish structured collaboration among key actors (fairs, museums, industrial clusters, and public bodies), underpinned by clear agreements, effective regulations, and innovative tools. Only through this integrated approach will it be possible to build a more sustainable and democratic future, in which the exhibition world is fully engaged.

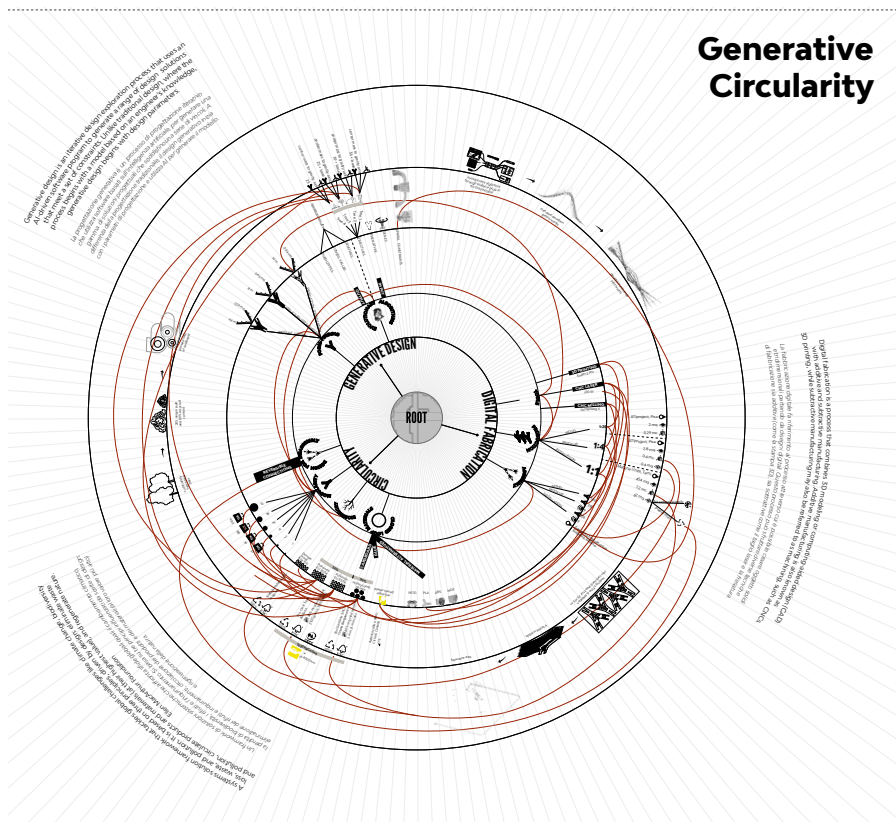


Fig. 37. Infographic of consumption data for the **Generative Circularity** project, conceived by ATI Project – Research and Development Department, and realized by Materieunite.

Notes

¹ Università Iuav di Venezia. (n.d.). NSBVN – Sustainable Exhibit: Promuovere l'economia circolare negli allestimenti espositivi. Inter-university cluster composed of three Italian and two foreign universities, with more than 25 stakeholders including institutions, museums, associations, and companies.

² Research funded through the public notice for the submission of capacity-building project proposals for cultural operators, under the NRRP, Mission 1 – Digitization, innovation, competitiveness, culture and tourism; COMPONENT 3 – Tourism and Culture 4.0; MEASURE 3 – Cultural and Creative Industries; INVESTMENT 3.3 – “Capacity building for cultural operators to manage the digital and green transition”; Sub-investment 3.3.3 “Promote the reduction of the ecological footprint of cultural events by fostering the inclusion of social and environmental criteria in public procurement policies, thereby steering the supply chain towards the eco-innovation of products and services” (Action B I); funded by the European Union – NextGenerationEU and managed by the Italian Ministry of Culture.

³ Politecnico di Milano, Department of Design. (n.d.). Places+: Design of places for sustainable transitions (B. Di Prete, A. Rebaglio, E. Lonardo, L. Ratti); research line “Places+ Sustainable Exhibit.”

⁴ First NSBVN – Sustainable Exhibit Cluster Conference, Università Iuav di Venezia, Ca' Tron, 17–18 June 2024.

⁵ The various focus groups included representatives of fairs and museums (including Fiera Milano, Triennale di Milano, Musei Civici Veneziani, Fondazione Prada); design firms and exhibition contractors (including beMatrix, Fogarolo Allestimenti, Foscari, Materieunite, Plotini Allestimenti, Saviola); trade associations (e.g., ADI, AEFI, AIAP, FederlegnoArredo – ASAL Assoallestimenti, ICOM); logistics firms (Fercam); universities and public bodies (Università Iuav di Venezia, Politecnico di Milano, Ca' Foscari University of Venice, University of Ferrara); and professional designers.

⁶ Research program “CAPitoli urbani,” carried out by the Politecnico di Milano – Department of Design (Places+ group) for CAP, 2021–2023.

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ABSTRACTS

Authors'
BIOGRAPHIES

Reflections for drafting the CAM Allestimenti

A legacy of the first conference on sustainable exhibit promoted by the NSBVN Cluster

The analysis of the Criteri Ambientali Minimi (CAM) for events highlights several critical issues regarding their applicability and the lack of specific parameters for the exhibition sector. By comparing existing regulations with current practices in the fair and museum contexts, the essay underscores the urgent need for regulatory updates that introduce more concrete strategies for the sustainability of exhibition setups. Among the proposed solutions are Design for Disassembly, the use of reusable materials, and the standardization of dismantling processes. The text also advocates for the creation of a dedicated CAM Allestimenti (currently absent), aimed at more effectively regulating material management and the life cycle of exhibition installations. The involvement of reuse platforms, collaboration among actors across the supply chain, and the promotion of new design practices are identified as key factors in facilitating a sustainable transition within the sector.

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Barbara Di Prete is Associate Professor at the Department of Design of the Politecnico di Milano, where she conducts research at the intersection of urban, exhibit, and interior design. An architect and PhD in Interior Architecture and Exhibition Design, she co-founded the Ghigos studio in 2003, realizing projects for internationally renowned institutions such as MAXXI, Expo 2015, MoMA, and Triennale di Milano.

Currently, through the inter-university research groups Reside, Places+, and NSBVN, she investigates the role of design from a sustainability perspective—both energetic and social—and explores strategies for the adaptive reuse of abandoned buildings. Her recent research projects include De.Sign. The Role of Design in the Energy Transition Process (for ENEA); CAPitoli Urbani (for CAP); AMSHI – Advanced Solutions for Mitigating the Impact of Heat Islands on Urban Roads (for Alta Scuola Politecnica); and Greenway dei Due Parchi. Vivere il Territorio (for Regione Lombardia, ongoing).

Riccardo Palomba

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Riccardo Palomba is a designer specializing in participatory design and digital product development, with experience in both academic and corporate contexts. He has collaborated with institutions such as the Politecnico di Milano and the Iuav University of Venice, working as a Junior Researcher and Research Fellow, as well as with companies like NonSiButtaViaNiente Sbarl and Save The Duck SpA, developing UX/UI design projects and communication strategies. He has gained experience in managing complex networks, including a national network of museums and fairs committed to sustainability in the exhibition sector.

Since his master's thesis, he has collaborated with associations and local organizations to co-create future scenarios and sustainable development strategies. His research focuses on methodologies for territorial regeneration, with a particular emphasis on interventions in abandoned rural contexts.

In 2023, he co-founded and currently serves as President of InTra Aps, a social promotion association that develops regenerative methodologies to engage people in designing the future of their territories.

In a world where sustainability is no longer an option but a necessity, exhibition design — a discipline inherently ephemeral and temporary — is also called to reinvent itself.

This volume tells the story of the emergence of a new professional figure: the “eco-Allestitore” (eco-exhibition designer), a mediator between creativity and responsibility, capable of integrating design, technology, and environmental care.

Born from the experience of the *NSBVN – Sustainable Exhibit Cluster* and the project *TOCC – Exhibit 2.0: The Ecological Turn*, the book brings together reflections, research, and practices shared by universities, cultural institutions, companies, and professionals.

It traces a path that unites theory and action, past and future, transforming the ephemeral from a synonym of waste into an opportunity for connection, innovation, and sustainable culture. *Towards the Figure of the Eco-Exhibition Designer* is not merely a collection of essays but an invitation to imagine new ways of designing and inhabiting temporary spaces — building a lasting legacy made of shared ideas and practices, not waste.

Davide Crippa, architect and PhD in Interior Architecture and Exhibition Design, studied under some of the masters of Italian design, completing his education with an interdisciplinary outlook. In 2003, he founded the Ghigos studio and has since carried out wide-ranging research spanning exhibitions, installations, and internationally significant projects. From 2007 to 2021, he taught at the Politecnico di Milano and the Nuova Accademia di Belle Arti in Milan; he is currently Associate Professor at the IUAV University of Venice, where he explores the potential of interaction design and new digital fabrication technologies within a circular economy framework, with a specific focus on sustainable exhibition design.

Barbara Di Prete, architect and PhD in Interior Architecture and Exhibition Design, is Associate Professor at the Department of Design of the Politecnico di Milano, where she conducts research between exhibit and interior design. In 2003, she co-founded the Ghigos studio, realizing projects for museums and institutions of international renown (MAXXI, Expo 2015, MoMA, Triennale di Milano). She currently works with the research groups Reside, Places+, and NSBVN, investigating the role of design from a sustainability perspective.