

2023

Environmental Sustainability – Carbon Neutrality Report

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The Commitment of La Biennale di Venezia

The Journey to Carbon Neutrality

Since 2021, La Biennale di Venezia has made a deliberate decision to publicly disclose the environmental impact of its events, quantified in terms of their carbon footprint. Furthermore, it is actively committed to fighting climate change by promoting a more sustainable approach to the planning and execution of its events.

The 78th Venice International Film Festival, held in 2021, became the first Biennale di Venezia event to be certified as achieving a zero carbon impact (carbon neutral), and was the first event in its field to be recognized worldwide for having achieved this significant milestone.

Based on the analysis of their impact, our objective is to achieve carbon neutrality by measuring, reducing, and offsetting the emissions associated with its Exhibitions and Festivals.

The entire process we have adopted follows the internationally recognised standard PAS2060 set by the British Standard Institute and is independently verified by RINA, a third-party certification body.

In 2023, this result was achieved for the following events:

- 18th International Architecture Exhibition
- 51st International Theatre Festival
- 17th International Festival of Contemporary Dance
- 80th Venice International Film Festival
- 67th International Festival of Contemporary Music

Actions Taken to Limit Our Environmental Impact

To put its commitment into action, La Biennale di Venezia has structured a plan of actions aimed at reducing the emissions associated with its events, to work in tandem with its carbon offsetting operation. The commitment therefore involves decarbonisation actions and awareness-raising activities targeting the general public, the visitors and the suppliers, whose contribution is key to achieving concrete and lasting results.

In particular, as required by the GHG (Greenhouse Gas) Protocol for greenhouse gas accounting, La Biennale has implemented actions to manage:

- "scope 1" direct emissions under the control of La Biennale through which it is possible to directly affect decarbonisation;
- "scope 2" indirect emissions from the purchase of energy, and electrical energy in particular;
- "scope 3" indirect emissions that depend on other bodies but are connected to the activities of La Biennale, and involve transport, travel, hospitality and other services that are necessary for the events organized by La Biennale to take place.

Clean Energy

The venues of the Arsenale, Giardini, the Ca' Giustinian offices, and the Lido for the temporary installations during the Venice Film Festival, are powered exclusively by electricity from renewable sources.

This structural change has resulted in a reduction of emissions equivalent to around 3,229.87 tonnes of CO₂, based on a consumption of circa 3,229,871 kWh¹.

Materials and Logistics for the Installations

Within this area, the adopted actions are guided by the principles of the circular economy. More specifically, during the installation of Biennale Architettura, the project involved the reuse of 63.83 tonnes of plasterboard installed for the previous event in the exhibition areas, leading to a savings of approximately 3.82 tonnes of CO₂.

The recovery and recycling of materials make it possible to prevent the emissions that would be generated by the supply chains involved in producing the same quantity of material from virgin resources.

The handling of installations and equipment within the event venues is carried out using electric forklifts, eliminating the emissions associated with diesel fuel usage. The boats used for waterborne transport are all equipped with EURO 6 engines.

Food and Catering Service

As part of the catering service tender, prospective suppliers were asked to expand their vegan and vegetarian options. These food choices use raw ingredients that have a lower environmental impact compared to those of other supply chains².

The culinary offerings, available at all event venues, have been widely appreciated by the public.

¹ The emission factor applied is the ISPRA national mix

^{2 &}lt;u>https://ourworldindata.org/explorers/food-footprint</u>

Furthermore, the plates, cutlery, and disposable glasses provided to users are made from compostable materials, thereby eliminating the generation of plastic waste.

More specifically, during the Venice International Film Festival, we were successful in increasing the offer of vegetarian meals leading to a 314 kg increase in the supply of vegetables, and a 276 kg reduction in the supply of meats compared to 2022.

Dematerialisation and Use of Environmentally Friendly Materials

The most effective way to reduce emissions related to the use of materials in manufactured goods and services is to forego them entirely. In this regard, we have paid special attention to reducing the use of paper materials. To this end, La Biennale di Venezia has introduced the following measures:

- paper tickets have been replaced by digital versions, and visitors are encouraged to avoid printing them;
- press kits and paper folders have been phased out;
- the production of promotional materials (programmes, postcards, and short guides) has been reduced, along with the consumption of paper for office work, especially in the procurement processes.

La Biennale di Venezia is committed to shifting its merchandising towards products made from environmentally friendly materials.

- La Biennale's institutional tote bags (about 10,300 pieces) and those to be distributed during the 80th Venice Film Festival (approximately 3,200 pieces) will be made from fabric produced from recycled plastic bottles (15 x 500ml bottles for each bag). In total, this amounts to over 5,062 kg of recycled plastic³.
- The bags distributed during the DMT festivals are made from organic cotton, certified with ecolabel fair trade standards.

Videoconferencing

To leverage the opportunities presented by digitalisation, we have made the decision to eliminate all off-site in-person press conferences, both in Italy and abroad. Instead, we have transitioned to streaming conferences, effectively reducing the environmental impact associated with travel.

Separate Waste Collection

Plastic and paper waste are collected separately from general waste at all event venues. In particular, every office in the institutional headquarters has been provided with bins to separately collect Paper/Glass/Plastic waste.

Public Awareness

È stato chiesto al pubblico che partecipa alle nostre manifestazioni di fare scelte responsabili e assumere comportamenti virtuosi. Sul sito web della Biennale, nella sezione dedicata alla sostenibilità ambientale⁴, è stato reso disponibile un decalogo di buone pratiche orientate a ridurre gli impatti e rendere più sostenibile la visita e il soggiorno a Venezia.

^{3 25} g of plastic per 500 ml bottle.

^{4 &}lt;a href="https://www.labiennale.org/en/environmental-sustainability">https://www.labiennale.org/en/environmental-sustainability

While purchasing tickets, visitors are further engaged by the request to complete a questionnaire that includes three questions regarding their reason for visiting Venice, where they are travelling from, and what means of transport they will use to reach the city.

This moment of engagement is not only valuable to La Biennale's internal goal of more accurately measuring the emissions we are responsible for, it is yet another tangible signal to the public of our attention to this issue.

Supplier Awareness and Assessments

Our sustainability objectives are communicated to existing and potential suppliers through specific disclosures, which are also published in a dedicated section of our website. These disclosures outline the criteria that Biennale intends to adopt to develop and maintain an environmentally sustainable supply chain over time.

These criteria are applied in a differentiated manner based on the types of goods and services provided.

While continuing current initiatives, La Biennale intends to expand its plan by taking new actions, such as:

- strengthening environmental communications targeted at the public attending our events;
- raising awareness among the artists participating in the festivals and exhibitions;
- raising awareness among organisers of the national participations in the Art and Architecture Exhibitions and collateral events;
- fully dematerialising the cycle of contracts;
- in particular, to facilitate accounting of the CO₂ emissions relative to transport, suppliers have been asked to fill out recapitulatory reports in order to aggregate and standardise the data regarding: means of transportation, transportation routes and engine power.

Carbon Footprint Reporting

Calculation Methodology

CO₂ emissions are calculated by taking into account the entire life cycle of the event, including the phases of organisation, installation, management, and finally dismantling. This calculation involves multiplying primary data, which represents the carbon impact factor for each source, by the corresponding conversion factor.

Primary data is gathered from the ticketing system and other management systems, or may be collected from suppliers, while the conversion factors are derived from publicly available databases.

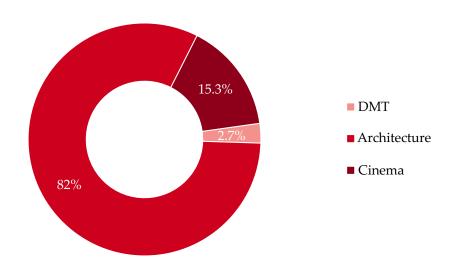
Main Sources Under Consideration	Emissions Calculation Drivers (Primary Data)
Energy and fuel consumed in the venues hosting the events	Quantity and origin (fossil/renewable) for electricity; quantity by type for fossil fuels
Biennale headquarters and events organisation	Energy and water consumption (Ca' Giustinian), paper consumption, Biennale employee commutes, remote work energy consumption, business trips broken down by transport type (plane/train)
Furnishings and fittings	Type and quantity of material, sourcing from
Merchandising: promotional materials and prizes	recycling chains
Furnishings and fittings - logistics	Journeys (round trips)
Travel and overnight stays - accredited visitors	Journeys (round trips) broken down by transport type
Travel and overnight stays - the general public	(plane/ train), number of overnight stays
Food services	Quantities of raw materials and goods used in the provision of services
Sanitation services	Relevant surface areas
Broadcasting and server usage	Amount of data exchanged
Waste/waste produced when installations are dismantled and disposed of	Type and quantity of waste, broken down by disposal method (landfill or recycling/recovery)

Exhibitions and Festivals results

The combined carbon footprint for all the events analysed in 2023 was 54,960.62 tonnes of CO₂.

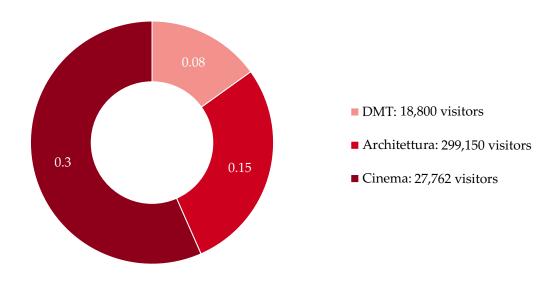
Event	Carbon Footprint (tCO ₂)	Visitors (no.)	Carbon Intensity
17 th International Festival of Contemporary Dance 67 th International Festival of Contemporary Music 51 st International Theatre Festival	1,497.28	18,800	0.08
18th International Architecture Exhibition	45,042.74	299,150	0.15
80th Venice International Film Festival	8,420.60	27,762	0.30
Total	54,960.62	345,712	0.16

Contribution of each event to the total Carbon Footprint (tCO₂)



These events attracted a total of 345,712 visitors. Therefore, the carbon intensity, calculated as the ratio between emissions and the number of visitors, was 160 kg of CO₂ per visitor.

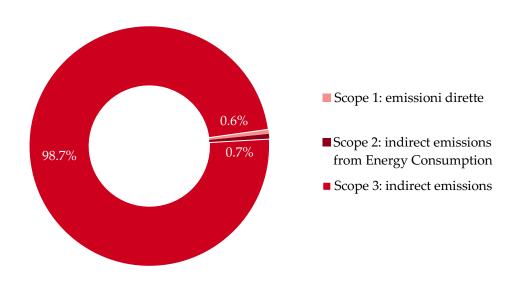
Carbon intensity in kg CO2 per visitor and number of visitors per event 2023



Division of the total CO₂ emissions per "Scope" typology

Scope	Source	Carbon Footprint (tCO ₂)	Carbon Footprint (%)	
1	Furnishings, Fittings and Promotional Materials	347.811	0.6%	
2	Energy Consumed (from non-renewable sources)	385.83	0.7%	
	Water Consumed	2.38		
	Leaks of Refrigerants	0.2		
3	Business Travel and Home-Work Commutes	302.02	98.7%	
	Furnishings Transportations Logistics	360.62		
	Travel and Overnight Stays	52.969		
	Local Mobility	14.89		
	Waste generated during the events	26.79		
	Furnishings End-of-Life	16.04		
	Waste/waste produced from dismantling and disposal of installations	71.23		
	Food Services	451.85		
	Cleaning Services	3.78		
	Broadcasting and Digital Services	8.18		
	<u> </u>	54,960.62	100%	

Scope 1, 2 and 3 – Direct and Indirect Emissions

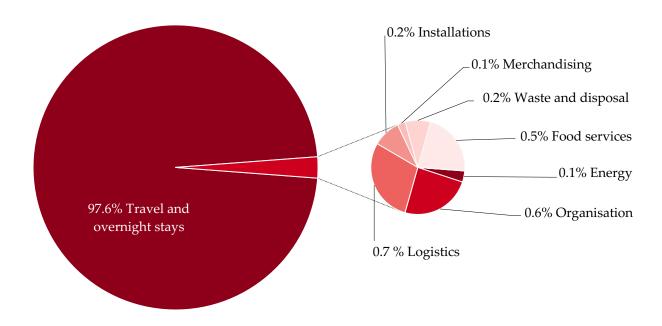


The breakdown of the emissions by source for each event is provided below. The data reveals that people's mobility (including travel and overnight stays of the general public, accredited visitors, artists, and companies and service personnel) is the most significant contributor, accounting for approximately 90% to 97% of all emissions. This varies based on the percentage of those who come from abroad and the use of airplane travel.

18th International Architecture Exhibition – 2023

Source	Carbon Footprint (tCO ₂)	Carbon Footprint (%)
Energy and fuel consumed on site	41.36	0.1%
Organisation	263.17	0.6%
Furnishings and fittings	102.77	0.2%
Furnishings and fittings - logistics	313.59	0.7%
Merchandising: promotional materials and prizes	29.63	0.1%
Travel and overnight stays	43,962.84	97.6%
Waste, installations end-of-life and disposal	93.57	0.2%
Food Services	234.70	0.5%
Sanitation Services	1.11	0.0025%
Total GHG Emissions	45,042.74	100%

Carbon Footprint 18th International Architecture Exhibition



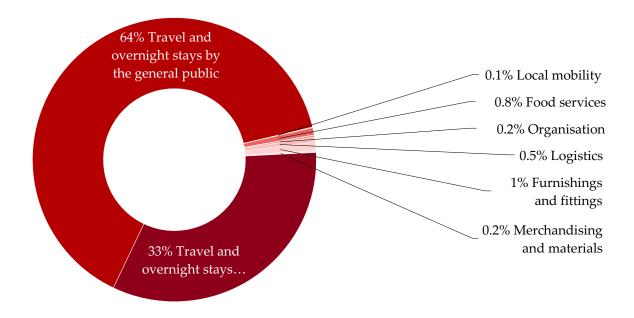
51st International Theatre Festival – 2023

17th International Festival of Contemporary Dance – 2023

67th International Festival of Contemporary Music – 2023

Source	Carbon Footprint (tCO ₂)	Carbon Footprint (%)
Energy and combustibles for stationary uses	0	0%
Organization	3.56	0.2%
Furnishings and fittings	14.55	1%
Furnishings and fittings logistics	8.15	0.5%
Merchandising: promotional materials and prizes	3.28	0.2%
Travel and overnight stays of artists and companies	492.36	32.9%
Travel and overnight stays of visitors	961.79	64.2%
Local mobility	0.81	0.1%
Waste, installations end-of-life and disposal	0.25	0.02%
Food services	12.35	0.8%
Cleaning and sanitation services	0.19	0.01%
Total GHG emissions	1,497.2	100%

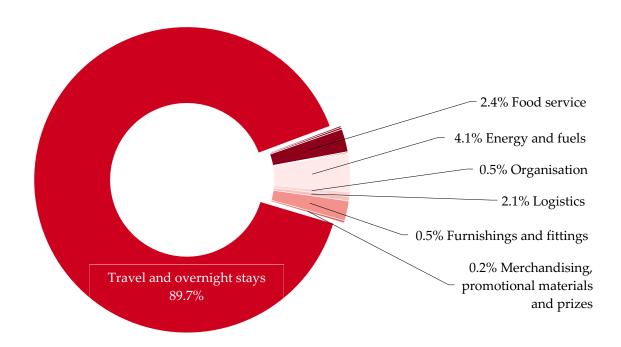
Carbon Footprint for the Dance, Music and Theatre Festivals



80th Venice International Film Festival – 2023

Source	Carbon Footprint (tCO ₂)	Carbon Footprint (%)
Energy and combustibles for stationary uses	343.56	4.1%
Organization	41.50	0.5%
Furnishings and fittings	176.85	0.5%
Furnishings and fittings logistics	38.88	2.1%
Merchandising: promotional materials and prizes	20.25	0.2%
Travel and overnight stays for accredited visitors, the general public and service personnel	7,552.57	89.7%
Local mobility	14.08	0.2%
Waster, installations end-of-life and disposal	17.26	0.2%
Food services	204.80	2.4%
GHG leaks from air conditioning	0.19	0%
Cleaning and sanitation services	2.48	0%
Broadcasting and server usage	8.18	0.1%
Total GHG emissions	8,420.60	100%

Carbon Footprint for the 80th Venice International Film Festival



Offsetting Projects

The carbon neutrality of events in 2023 was achieved using the offsetting mechanism, which involves purchasing carbon credits from accredited markets. La Biennale has purchased a total of 55,000 tCO₂ thereby offsetting the direct and indirect emissions.

This procedure supports abatement projects in developing countries the purpose of which is to decrease and abate greenhouse gas emissions. More specifically, the following projects were funded.

- **P.S.C** wastewater treatment and biogas utilisation project (Thailand): the project involves the recovery of fugitive biogas released by the wastewater from a starch factory, from a sweetening facility and an ethanol plant. This was achieved by using an up flow anaerobic sludge blanket (UASB) and covered lagoons. The biogas generated is utilized as fuel in a hot oil boiler and steam boilers to produce electricity and heat. (Public link: <u>Verra Search Page</u>)
- CO₂ reduction for industrial processes (Colombia): AGA FANO S.A. is a company that produces liquid CO₂ and other industrial gases, which currently uses fossil fuels as a raw material. This project seeks to replace the production of CO₂ through the combustion of natural gas by capturing the CO₂ produced by the alcohol fermentation process at Ingenio Providencia. This alternative will allow complete elimination of natural gas usage in the current AGA FANO facilities in Bogotá. (Public link: <u>CDM: AGA FANO Liquid CO2</u> production using CO₂ from a fermentation plant at Ingenio Providencia (unfccc.int))
- **Installation of a renewable solar energy plant** (India): the project supports the installation of grid-connected renewable solar energy power plants in India, ensuring energy security, diversification of the grid generation mix and sustainable growth of the electricity generation sector. (Link: <u>Verra Search Page</u>)

Venice, 22 January 2024