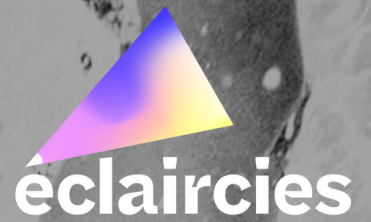




CARBON  
MARKET  
WATCH



# Going for green

Assessing the climate strategy and  
communication of the 2024 Paris Olympics

April 2024

# Table of contents

## 1 Executive summary 02

## 2 Introduction 03

## 3 The Paris 2024 climate strategy 04

Governance

Applied guidelines

Laudable but insufficient efforts: Climate strategy methodology

Laudable but insufficient efforts: Sectoral measures

## 4 Beyond the games' carbon footprint 18

Evolution of Paris 2024's public communication

Paris 2024 target setting in technical documentation

Opaque carbon credit purchases

Encouraging communication but confusing nuances

Responsible sponsorship

## 5 En-route to future-proof games 24

How to set the carbon budget?

Rethinking the Olympic concept

## 6 Conclusion 28

# Executive summary

Amidst the splendour of the Olympic games lies a sobering reality: the urgent threat of climate change. The 2024 games are coming to Paris, home of the 2015 legally binding international climate agreement that set a target to limit the temperature increase to 1.5°C above pre-industrial levels. The Paris 2024 organising committee has implemented a climate strategy, which is a decent attempt at greening the games. However, an investigation of the efficacy and communication of this plan raises fundamental questions, and it becomes clear that no Olympic Games can truly be compatible with the Paris Agreement's objectives unless their overall operations are fundamentally reformed.

Though commendable, the Paris 2024 climate strategy aim to minimise the event's carbon footprint is incomplete, and falls short of achieving transparency. While setting targets and implementing logical policies across sectors - such as construction, food supply, non-food purchases, transport, and energy consumption - the strategy lacks detailed methodologies and comprehensive monitoring, and is not clearly communicated. This report recommends transparent and clear disclosure of methodologies, clear articulation of sustainability criteria, and rigorous validation and monitoring to ensure alignment with global climate goals and enhance the effectiveness of future Olympic Games' sustainability efforts.

Over time, the communication strategy surrounding the climate goals of the Paris 2024 Olympic Games has evolved, initially emphasising a principle of carbon neutrality, and even introducing a description of 'climate positive'. Both of these misleading claims were eventually dropped. However, inconsistencies remain between public-facing communication and technical documentation regarding the use of carbon credits and the event's carbon neutrality goal. Transparency regarding carbon credit purchases is lacking, hindering public engagement and an assessable oversight of the event's environmental responsibility. Additionally, many of the games' sponsors are not climate leaders and the absence of climate criteria when selecting sponsors is a missed opportunity to influence large companies. Ultimately, if the Olympic Games is to lead by example in its sustainability communication, they must publicly demonstrate measurable progress, transparency, and inspire broader adoption of sustainable practices.

The role of the Olympic Games in a future low-carbon world is under scrutiny, considering what remains of the limited global carbon budget and this event's significant environmental footprint. To align with a 1.5-degree future, transformative alternatives that challenge the conventional structure of the games are necessary. Solutions include setting a carbon budget compatible with the Paris Agreement, with pathways tailored to the unique situations of host cities and countries. Another is to spread Olympic events across different countries to reduce the size of the games and limit international travel. This would encourage participation from local spectators, giving more people access to the Olympics and reduce their overall footprint at the same time. This alternative model aims to enhance inclusiveness, reduce demand on infrastructure, and improve the overall experience of the games. While not prescriptive, this proposal urges the International Olympic Committee to rethink the games through a sustainability lens to inspire transformative change.

# Introduction

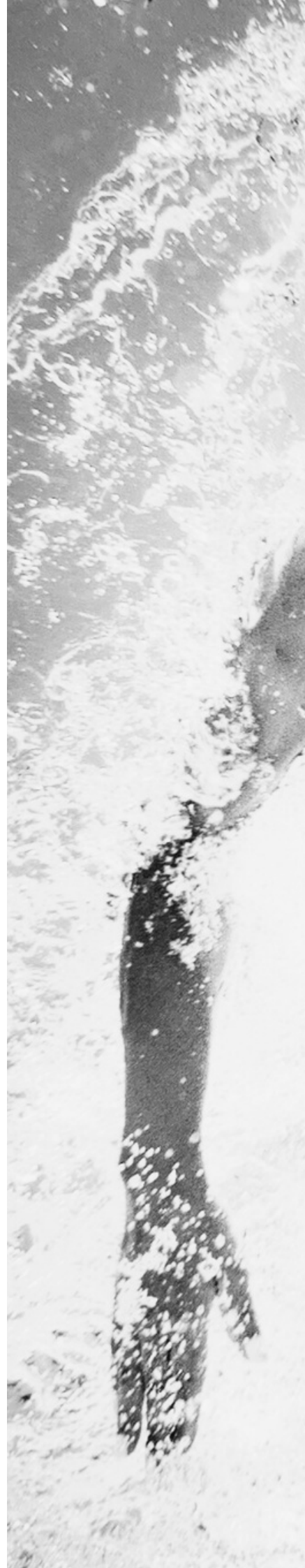
The world comes together once every four years to celebrate its pinnacle sporting event, the Olympic Games. Records demonstrating the greatest human athletic achievements are broken and rightly celebrated, but as humanity continues to smash much less coveted records of global temperatures, the role of mega events has to be highlighted, and better, more responsible organisational frameworks should top the podium.

While the games embody the pinnacle of athletic prowess, cultural exchange and global relations, the paradox of their environmental impact cannot be overlooked. With the Intergovernmental Panel on Climate Change (IPCC) demanding that global greenhouse gas emissions be reduced by 43% and carbon dioxide emissions by 48% below 2019 levels by 2030, the extravagance of the games stands in stark contrast to essential climate action. In recognition of this dilemma and acknowledging their vulnerability to the repercussions of climate change as forecast heatwaves in France risk affecting athlete and spectator health, the Paris games have implemented a climate strategy.

In examining the efficacy of the current strategy, fundamental questions arise: is the existing approach sufficient to align with the target of limiting global warming to 1.5°C above pre-industrial levels? And how effectively are these efforts relayed to the public: can spectators rely on the accuracy of the headline communication of the Paris 2024 committee?

In this report, we unravel these questions. Part 1 scrutinises the Paris 2024 climate strategy, evaluating its strengths and limitations. In part 2, we discuss the influence and role of the games, as well as the credibility of public-facing assertions regarding their environmental impact. Part 3 explores the transformative measures necessary to realign the planning of future Olympics in a way that is compatible with the objectives of the Paris Agreement and a 1.5°C trajectory.

In the final section, we advocate for a rethinking of the games — a paradigm shift that may prove uncomfortable initially but the long term changes are ultimately essential for ensuring alignment with the 1.5°C goal. By embracing bold alternatives, we can pave the way to a future where the Olympic Games serve as a beacon of sustainability and resilience in the face of climate uncertainty.



The image features a grayscale background of the Eiffel Tower in Paris, viewed through a series of large, dark, interlocking circular rings that resemble a stylized infinity symbol or a complex knot. A vibrant green line curves across the top right of the image. Overlaid on the left side is the text 'The Paris 2024 climate strategy' in a bold, green, sans-serif font.

**The  
Paris  
2024  
climate  
strategy**

## Governance

The International Olympic Committee (IOC) entrusts the organisation of the Olympic Games to the National Olympic Committee (NOC) of the host country and the host city. The NOC forms an Organising Committee (OCOG), comprising IOC members, the NOC President and Secretary General, host city representatives, and public officials. The OCOG is responsible for the planning, organisation and implementation of the games. Sustainability is not mentioned as a core consideration on the [official Olympics website](#), a worrisome oversight for those who have knowledge of the carbon footprint of the event.

## Applied guidelines

The OCOG of the Paris Olympics has developed a climate strategy with the aim of reducing the impact of the games. This strategy is based on [two guides](#) developed by the Organisation for Economic Co-operation and Development (OECD) and financed by the IOC. The Organising Committee of Paris 2024 is the first edition of the Olympic games to apply this guidance, which will [only become a mandatory impact measurement tool starting with the Olympic and Paralympic Winter Games 2030](#). This year's edition will provide evidence of whether the plan is working or not.

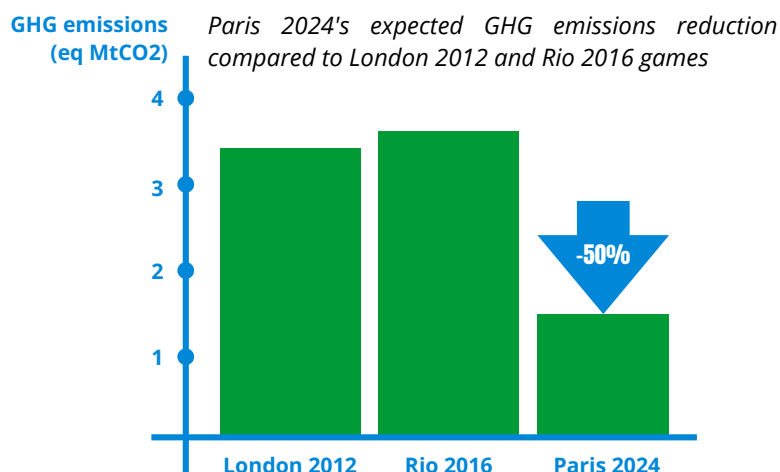
The OECD guidelines describe principles to measure the impact of mega events. [Part 1](#) delivers a general overview of impact categories, methods, and indicators to measure the social, economic and environmental impact. [Part 2](#) discusses indicators, such as the carbon footprint to measure the environmental impact, and details fundamental principles, such as the separation of carbon offsetting and emissions reporting. Amidst the complex set of guidelines, we welcome the recommendation not to include offsetting for emissions accounting. We also welcome the recommendation to use reporting standards [GHG Protocol](#) and [GRI - used by Paris 2024](#) - for emissions disclosure.

Paris 2024 signed up to the [UN initiative 'Sports for Climate Action'](#), which includes a commitment to slash emissions by [50% by 2030 \(with a recommended 2019 baseline\)](#), carbon neutrality by 2040 and specific targets for scope 3 (indirect value chain emissions) should scope 3 emissions constitute over 40% of total emissions of the event. These actions show that organisers have clearly understood the message that engagement with climate change is crucial during this decade.

# Laudable but insufficient efforts: Climate strategy methodology

## Carbon budget ahead of the games

In contrast to previous editions of the Olympics, the organising committee has set a target ahead of the games to half the event's greenhouse gas (GHG) emissions compared with the average of summer editions of 2010s Olympics (London and Rio Games). To achieve this target, a carbon strategy has been devised to avoid and reduce the impact of construction, operations and travel for the games.



Paris 2024 has set itself the objective of controlling the impact of the event by forecasting its carbon footprint and setting a target from the very start of preparations to organise the games.

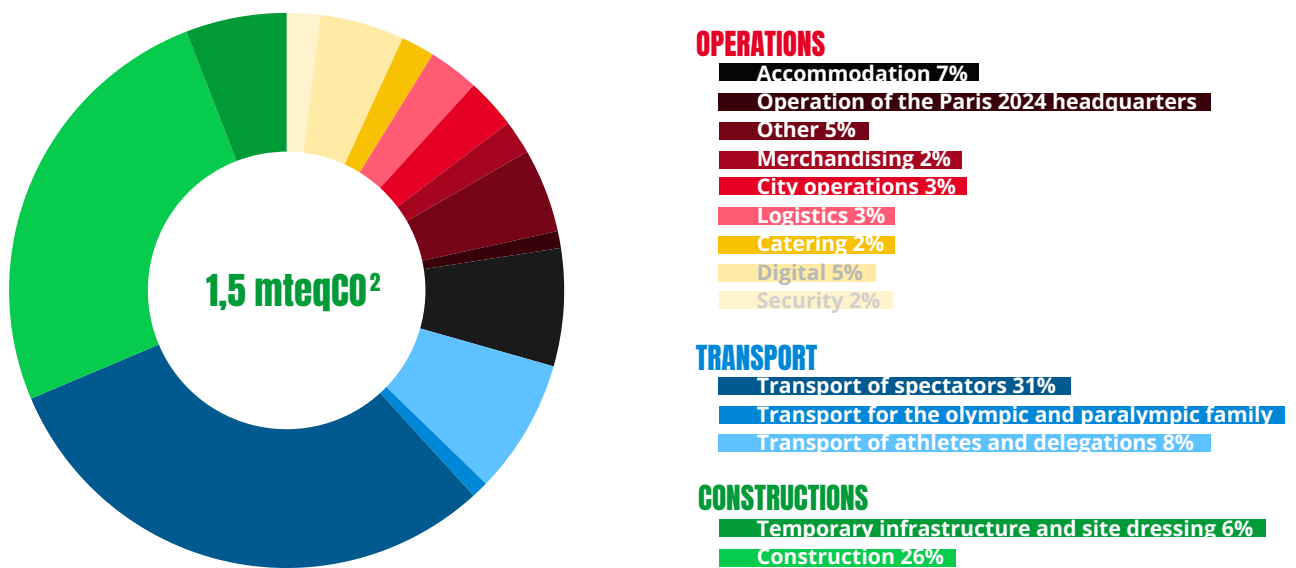
This approach allows carbon considerations to be included in decisions taken during the design of and preparation for the event, which is crucial when incorporating a rigorous climate strategy. It is in line with the IOC's Olympic Games Guide on Legacy (2019), which states that the measurement of the impact of an event must be done through specific, measurable, attainable, relevant and time-bound (SMART) key performance indicators (KPIs). This approach is also recommended in the aforementioned OECD 2023 report on How to measure the impact of culture, sports and business events, which "calls for for the early adoption of an event evaluation strategy to define at the outset what the expected impacts should be, with clear and measurable targets".

However, it remains to be seen whether this goal of (more than) halving the carbon footprint of the event compared to the London 2012 (3.3 million tonnes of CO<sub>2</sub> equivalent) and Rio 2016 (3.6 million tonnes of CO<sub>2</sub> equivalent) Olympics is truly compatible with the Paris Agreement, which requires a steep emissions reduction in order to limit the increase of global temperatures to 1.5°C compared to the pre-industrial average, and achieving global net zero CO<sub>2</sub> emissions by 2050 at the latest. The organising committee has not been clear about the reasons for their target, and could have put more effort into explaining the rationale behind its calculation.

The setting of a GHG emissions target ahead of the event is a positive, well-intentioned step. However, there is a lack of explanation of why this target has been set at this level, and whether the suggested 1.5 MtCO<sub>2</sub>e carbon budget is aligned with the objectives of the Paris Agreement. A key issue, as discussed in part 3, is that comparing carbon footprints across events calculated assuming differing methodologies is a flawed basis for scientific analysis.

## Opaque calculation and monitoring of the carbon footprint

According to the organising committee, the event's carbon budget breaks down as follows:



Paris 2024's expected carbon budget breakdown (2020 estimate). Source: Paris 2024, Stratégie climat (March 2021)

As discussed above, the definition of a carbon budget ahead of the games is a welcome development. However, the methodology used to calculate this carbon footprint remains opaque. Even though the [2021 Sustainability and Legacy report](#) states that the games are compliant with the [GRI 305 standard](#) in terms of emissions and scoping, the actual assumptions used for the calculation (number, origin and means of transport of visitors, type of on-site catering, infrastructure construction methods, etc.) are not described in any detail.

Even if several calculation frameworks for events exist ([GRI 305 standard](#), [OECD guidelines](#), the [IOC carbon footprint methodology for the Olympic games](#)), the choice of assumptions for the calculations is often subjective and cannot always be standardised. Carbon footprint assessments of different events carried out by different third parties may not lead to results being fully comparable.



A further accountability deficiency is the absence of public monitoring of emissions over time. The impact of activities that have already occurred, such as construction works, have not been publicly disclosed, which makes it impossible to verify if the volume of emissions to date is consistent with the forecast carbon budget.

Yet, the [OECD report](#) on the impact of events promotes “transparency in reporting” and “careful consideration of how evaluations are communicated to stakeholders and the public”. With direct reference to the Olympic Games Guide on Legacy, the report also states that planning “how indicator data will be shared amongst stakeholders and how to promote consistency in methodology and reporting is essential to coordinate good impact measurement”. Best practice would have been for the organisers to fully disclose the assumptions made for the carbon footprint calculation in the Sustainability and Legacy Report, as well as periodic reporting of the share of the carbon budget that has already been used.

A good practice would have been to disclose all assumptions made for the calculation, and regularly report the evolution of the carbon footprint and how it has aligned with the ex ante carbon budget throughout the preparation and organisation of the games.

## Laudable but insufficient efforts: Sectoral measures

This section evaluates the strengths and limitations of sectoral measures taken by organisers to reduce the carbon footprint of the games. For each sector, the analysis follows a three-step approach: first, the targets of Paris 2024 are described in detail, based on available data. They are then compared with science-based recommendations or national climate ambitions. In conclusion, a set of best practice recommendations are set for Paris 2024 and future games, in order to close the probable gap with the science-based Paris Agreement requirements.

Please note that our sectoral recommendations are incremental: they aim to improve the climate performance of each emissions category within the framework of the existing model. However, incremental improvement is not enough, which is why we suggest more sustainable models for the Olympics later in this report. Part 3 of the report will explore a transformative reimagining of this type of mega event.

The outcome of our sectoral analysis is summarised in the table below.

Source of GHG emissions	Share of total carbon footprint	Assessment of climate strategy quality
Construction	30%	Robust
Food	1%	Robust
Non-food purchases	20%	Incomplete and/or unclear
Transport	40%	Incomplete and/or unclear
Energy	8%	Incomplete and/or unclear

**Key:**

**Robust:** The GHG emissions source is addressed adequately by the Paris 2024 climate strategy, and in line with science-based recommendations. The actions taken by organisers can serve as an inspiration for future events of this type.

**Incomplete and/or unclear climate strategy:** Climate issues are only partially addressed, or public information is insufficient to adequately assess the quality of the climate strategy. Significant improvements are possible and necessary to ensure the Olympics are compatible with a low-carbon transition.

Around 30% of the games' carbon footprint is covered by a robust climate strategy. The other sources of emissions are insufficiently addressed by the organising committee.

## Laudable but insufficient efforts: Sectoral measures

### Construction (~30% of total carbon footprint): robust climate strategy

Paris 2024's construction-related emissions strategy can be considered robust, with a target of using 95% of existing or temporary sites (70% existing competition sites and 25% temporary sites) in order to avoid new construction as much as possible. For new buildings, the games have committed to implementing low-carbon construction standards and to promote wood as a building material, enabling a significant reduction in emissions compared with those that would occur from conventional concrete construction, assuming that the wood is sustainably sourced.

#### Avoiding new permanent constructions

The foremost clear action to reduce emissions in construction is to avoid building new structures: 95% of the sites used for the Olympics already exist or will be temporary.

Seven sites (Trocadéro, Eiffel Tower, Champ-de-Mars, Invalides, Alexandre III Bridge, Place de la Concorde, and Place de l'Hôtel de Ville) will install temporary infrastructure, including stands along the Seine for the Olympic Opening Ceremony. The organisers have pledged that the materials and structures used for these sites will be reused, repurposed or recycled. For maximum impact, priority should be given to repurposing existing structures and reusing rather than recycling temporary constructions.

However, we could find no public information on the actual breakdown between reuse, repurpose and recycling, meaning the actual impact of temporary constructions cannot be estimated.

#### Reducing the carbon impact of permanent construction

Three sites will house permanent construction: the athletes' village, the media village and the aquatic centre.

Two main policies have been mobilised to reduce the carbon consequence of construction: the use of bio-sourced materials, including wood, and reducing the use of virgin materials through reusing or recycling old materials.

The Société de Livraison des Ouvrages Olympiques (SOLIDEO) has set a target of no more than 650 kilogrammes of carbon dioxide equivalent per metre squared (kgCO<sub>2</sub>e/m<sup>2</sup>) for the construction of the Olympic and Paralympic Village.<sup>1</sup> By way of comparison, the average carbon intensity of construction today in France is around 1,400 kgCO<sub>2</sub>e/m<sup>2</sup> for new office buildings and 1,300 kgCO<sub>2</sub>e/m<sup>2</sup> for multi-family housing. Therefore, at first glance, the target of 650 kgCO<sub>2</sub>e/m<sup>2</sup> seems ambitious by today's standards but is obtainable as demonstrated by the actual performances reached by best-in-class new constructions in France. Therefore, the organisers should be able to reach this target by meeting this high standard. In the absence of the transparent tracking of GHG emissions that have already occurred, especially emissions related to construction, it is not possible to ascertain if this goal has indeed been achieved.

Overall, many significant initiatives can be observed, including the systematic integration of wood "whenever technically and economically possible". However, the "whenever possible" stipulation should be clearly explained, since the subjectivity of the formulation may easily justify the use of materials other than wood.

Examples of construction initiatives:

<b>Athlete's village</b>	Wood is integrated into building structures wherever technically and economically feasible. For example, all housing buildings less than 28 metres high in the Olympic Village use timber in their structure.
<b>Aquatic centre</b>	The Olympic Aquatic Centre will include the world's largest wooden concave arch, spanning over 80m. The building's orientation, compact size and insulation will make the most of solar gain. Heat will be produced by heat recovery systems, fed by the urban heating network. It will be equipped with a large-scale photovoltaic power plant, with 2,700 panels installed across the 4,680 sq.metres roof. The seats (as well as in the La Chapelle Arena) will be made entirely from local plastic waste.
<b>Media village / athletes</b>	Post, beam and floor, and post and slab structures have been designed to be reversible, with the intention of transformation into potential business premises.
<b>Headquarters</b>	6,000 cubic metres of mixed timber/concrete materials have been used for the building structure.

1. Paris 2024 Climate Strategy, March 2021

### **More ambitious construction considerations for future games must include :**

- 100% use of existing buildings, or temporary infrastructure that can be repurposed after the event
- Predominance of bio-sourced and recycled materials

## Food supply (~1% of total carbon footprint: robust climate strategy)

Even though food emissions are marginal relative to the total carbon footprint of the event, organiser's choices can set a leading example for broader societal shifts in attitude. Principles applied to food supply can be considered ambitious, with a target of 1 kgCO<sub>2</sub> per meal on average per 13 million meals and snacks served at Paris 2024 sites. This represents a 50% reduction compared to the French average (2 kgCO<sub>2</sub> per meal), which is coincidentally half the average at previous editions of the games too.

The food supply target is supported by a detailed action plan:

- Reducing animal proteins and offering more fruit, vegetables, and plant-based proteins in meals. For instance, 60% of the meals offered for sale in food and beverage outlets will be vegetarian.
- Mobilising local supply chains: 80% of the total food supply will be sourced from France, including 25% within 250km of competition venues. No food will be imported by air.
- Aiming for 100% of imports to be certified (organic, fair trade, etc.) and 80% of the total food supply sourced with a sustainability label, including 30% from farms that are organic or in the process of transitioning to organic production.
- Halving the provision of single-use plastic compared to 2020, which more than doubles the ambition of the French bill on plastic pollution covering the same timeframe (-20% by 2025 compared to 2020).
- A goal of recovering 100% of non-consumed food resources.

The games' strategy appears to be keeping pace with the food transition taking place in France. According to the French low-carbon strategy, agricultural sector emissions must decrease by 46% in 2050 compared to 1990. The targeted reduction of 50% in the consumption of meat by 2050, compared to 2022 levels is compatible with the French net zero target.

A logical way for the games to set an even more aspirational and lower carbon intensity target for meals served could be to opt for 100% plant based menus on site, and associate plant proteins with high athletic performance.

Considerations over food supply are certainly a positive aspect of the Olympics' sustainability strategy. At the same time, an opportunity is being missed to increase the overall climate impact by failing to highlight this in a powerful information campaign to encourage similar public behavioural shifts.

To take this strong food supply plan a step further, organisers could consider increasing the proportion of plant-based meals served compared to those that are animal-based, and aim for 100% of products from local, sustainable sources. The influence of the Olympic Games could also be leveraged by implementing a comprehensive information campaign to encourage a broader shift towards low-carbon diets.

## Non-food purchases (~20% of total carbon footprint, incomplete and/or unclear climate strategy)

The Paris games organisers state that sustainability criteria are applied “on 100% of the games’ purchases, as part of its responsible procurement strategy”. They also monitor, against internal KPIs, the proportion of products bought that have been eco-designed, as well as the proportion of rented products. In practice, however, there is no mention of a minimum threshold to be reached, nor any precise criteria or impact result communicated, which undermines the credibility of these measures.

Another notable aspect of the Sustainability and Legacy strategy of the games are carbon neutral purchases, wherein Paris 2024 mandates its commercial partners and suppliers to adhere to sustainability and carbon neutrality criteria for 100% of the products and services purchased by the games. The precise definition of "carbon neutrality" in this context is ambiguous. While it might suggest that suppliers offset their emissions, the intrinsic quality of the purchased products or services is overlooked, as is an alignment of this action with the Paris Agreement objectives.

This ambiguity is cause for concern as it allows even those products and services deemed environmentally damaging to be presented as "carbon neutral", regardless of their harmfulness to the climate. Paris 2024 does not indicate how this “carbon neutral purchases” strategy corresponds with the overarching “positive contribution” plan, providing no information on whether products described as carbon neutral are counted as ‘zero emissions’ when recording the Olympics’ carbon footprint. Moreover, there is a lack of detail over whether or not offsets used by the suppliers, if any, are counted as part of the games’ own volume of offsets.

Such claims are also not in line with the carbon footprinting methodology promoted by the IOC, which reads that "statements such as ‘zero carbon’, ‘carbon-free’ or ‘carbon neutral’ should not be used as they can be misleading”. Similarly, it is out of sync with the Olympic Games Guide on Sustainable Sourcing, which recommends that “all sustainable sourcing claims and declarations made, either by the OCOG or its suppliers/partners, need to be legal, fair, honest, transparent and verifiable (i.e. not be misleading and be supported by relevant quantitative data that is subject to verification from reputable sources).”

Inadequate definition of sustainability requirements for suppliers means organisers fail to deliver a responsible purchasing policy as the “carbon neutrality” claim is imprecise and unverifiable.

However, Paris 2024's circular economy strategy does take into account some of the key factors for designing a responsible purchasing guide:

- Questioning the need for new equipment, and borrowing from previously used stock has made it possible to reduce the number of furniture items from 800,000 to 600,000, according to the Organising Committee.
- Promoting eco-design in calls for tender, and using lower-impact, recycled materials such as production offcuts. The impact of this policy is not specified.
- A target of 100% reusability for temporary infrastructure, furniture and equipment after the event is pursued. This is supported by a principle of favouring rental over purchase.

Paris 2024's commendable efforts to reduce the event's material footprint is producing co-benefits additional to tackling its carbon footprint. However, the extent of these co-benefits is difficult to measure due to the lack of publicly accessible information (at the time of writing). The organising committee could make its communication more informative and transparent by explaining how and why it integrates various environmental strategies: climate, circular economy and biodiversity.

### **Best equipment purchase practices that should be implemented for the organisation of future editions:**

- Questioning what is needed, and pooling equipment whenever possible
- Develop a system for reducing new equipment purchases, giving preference to rental and second-hand equipment, and partner with local refurbishing or reuse networks
- Clear and transparent eco-design and carbon footprint criteria in calls for tender, consistent with the impact reduction objectives of the event
- Ensure reuse of temporary infrastructure, furniture and equipment post-event
- Avoid citing “carbon neutral purchases” as a good example when building a sustainable purchases strategy

## Transport (~40% of total carbon footprint, incomplete and/or unclear climate strategy)

### On-site transportation

The Committee's action plan satisfactorily covers on-site transportation. A real effort has been made to compact the area in which most of the games will be held, with more than 80% of the Paris venues located within a 10-kilometre radius of the Olympic Village, and 85% of the athletes housed less than 30 minutes from their event venues, thereby reducing the distances travelled by the Olympic family (athletes, staff, journalists, etc.).

Besides, the organisers have planned that a fleet of low-carbon vehicles will be made available to the Olympic family - although this likely covers only a small share of total attendees - in addition to a stated objective of 100% of venues accessible by public transport, bike and foot.<sup>2</sup>

However, delayed construction of major new transport routes (the CDG Express high-speed train linking Roissy to the centre of Paris, and lines 16 and 17, for example, will not be ready in time) could affect the forecasted 100% public transport access target. Ile-de-France Mobilités will be under pressure to transport approximately 10 million people per day, the equivalent of an annual peak day in the region, and over a much tighter geographical area (mainly Paris and Seine St Denis).

### Transportation from and to Paris 2024

More importantly, the organisers have been relatively silent on how they will address one of the main sources of emissions for the whole event: the transport of spectators, athletes, staff and journalists to and from their home countries. Air travel accounts for most transport emissions linked to the games.

Although organisers revealed an estimate for the expected GHG emissions related to transportation (about one-third of the total carbon budget, i.e. 0.5 MtCO<sub>2</sub>eq), details on how the action plan was to be carried out were sparse. The organising committee plans to "encourage", "recommend" or "invite" visitors to take the train, without explaining exactly how it will do this. As actions are purely informational, they will likely have only a minor, and hard-to-measure impact on GHG emissions.

### Freight transport

The answers to the question of freight transport are vague. Commitments are generic and flexible, allowing organisers plenty of wiggle room. This flexibility is the result of loose formulations built on imprecise terminology. For example, sourcing that is "as local as possible", "whenever possible", and modes of transport that are as low-carbon as possible (rail and river for long distances, active or electric mobility for the last mile), without defining what is considered "possible". Again, these measures should be communicated clearly and reflected in the estimations set out by Paris 2024.

2. Paris 2024 Climate Strategy, March 2021

## Best transport practices that should be implemented for the organisation of future editions:

- For on-site travel: 100% low-carbon local transport for spectators (public transport and/or active mobility)
- To limit the use of cars or planes, organisers should charter continental trains, and include this provision in ticket prices
- Incentivise ticket discounts to sporting events for international spectators that travelled by train
- Low-carbon transport modes for freight: rail and river for long distances, active or electric mobility for the last mile
- Partner with airline companies to encourage uptake of high-quality, sustainable aviation fuels, such as e-fuels





## Energy consumption (~8% of total carbon footprint): incomplete and/or unclear climate strategy)

According to organisers the 2024 Olympic Games venues will be supplied with 100% renewable electricity. However, it is not specified how the renewable electricity will be sourced.

In the vast majority of cases, the "purchase of renewable electricity" refers to bought green electricity certificates, or "guarantees of origin" (GOs). These certificates guarantee that a certain quantity of renewable electricity has been fed into a grid, and are a method of paying an additional "premium" to renewable electricity producers. However, production does not necessarily take place in the same country, nor at the same time, as the customer's consumption. Nor does a green electricity certificate guarantee that this production is additional, i.e. that the purchase of this certificate has triggered renewable production that would not have taken place in its absence. Hypothetically, the purchase of a GO could correspond to the production of renewable electricity at a solar panel in Poland during the day, and then be consumed at night in France, or be used towards financing the production of a French hydroelectric dam that has already been amortised for 50 years. However, there is no way to confirm that the purchase of a GO or a renewable energy certificate (REC) has actually led to the generation of renewable electricity.

If, on the other hand, "100% renewable electricity" is obtained, not through the purchase of GOs, but through direct contracts (high-quality Power Purchase Agreements, or PPAs), it might actually trigger additional renewable energy generation. If well designed, PPAs can supply electricity that has a trackable provenance from a new renewable production park, ensuring coherence between production and consumption. Moreover, such a policy makes a tangible contribution to the development of new renewable electricity production facilities based regionally.

When considering renewable energy targets and claims, the devil is in the details. A "100% renewable energy" claim can take many guises, but certain options are more credible than others. Even the comparatively better option of Power Purchasing Agreements can be far from ideal if not constructed carefully. To qualify the real impact of "100% renewable energy" claims made by the organising committee, there must at an absolute minimum be transparency over the market instruments used and evidence provided that the energy produced corresponds with what is consumed.

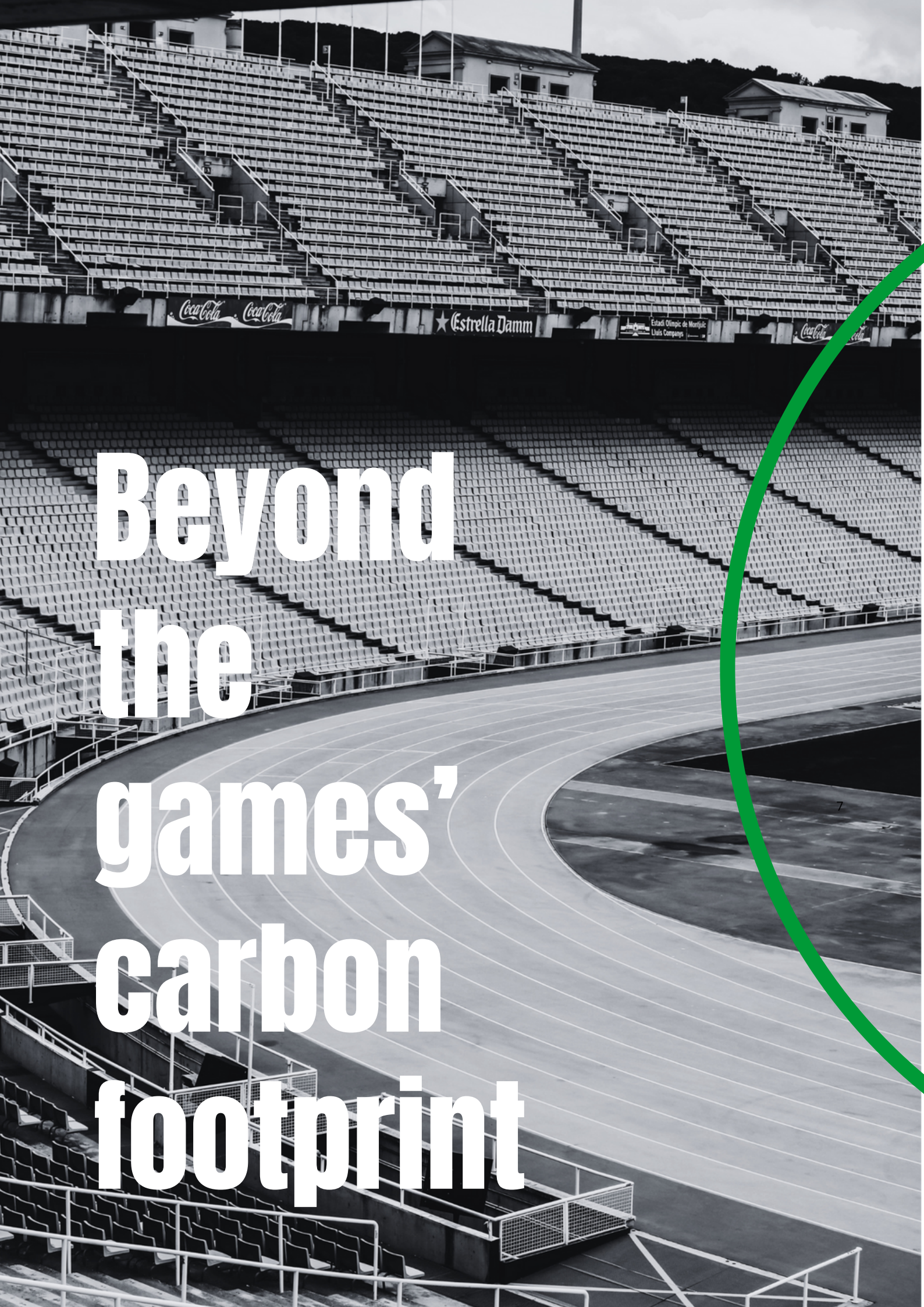
The lack of transparency over the definition of "100% renewable electricity" makes it impossible to analyse the true impact of the Olympics' strategy on climate change. Without full disclosure of what market instruments have been used, we cannot ascertain whether this headline claim is misleading to the public.

Finally, energy efficiency is crucial. Positive measures taken that reduce energy consumption deserve to be better detailed in the Paris 2024 communication, such as the decision not to install air conditioning in the athletes' village.

**Best energy supply practices that should be implemented for the organisation of future editions:**

- 100% renewable energy supply through high-quality Power Purchase Agreements
- Implementation of a plan to reduce energy consumption





# Beyond the games' carbon footprint

Coca-Cola

Coca-Cola

★ Estrella Damm

Estadi Olímpic de Montjuïc  
Lluís Companys

Coca-Cola

Coca-Cola

# Evolution of Paris 2024's public communication

No climate strategy is complete without communicating to the public the efforts taken and what it has achieved. According to the [IOC Carbon Footprint Methodology](#), communicating clearly and honestly is essential for robust climate communication.

Over time, what has been communicated by the 2024 games has evolved. Initially, the headline climate claim prominently featured a carbon neutrality ambition, but the public-facing communication was later amended to “the first Games with a positive impact on the climate”. This still suggested some form of (over)compensation of emissions and portrays that holding such mega events can be done without having a negative climate impact.

Since then, the claim has further evolved, dropping its “neutralisation” and “positive impact on the climate” angle, and now focuses on: [“Olympic and Paralympic Games in tune with society and its realities”](#). This devolution of claims [has been evidenced by reports](#) and official statements on the Paris 2024 website. In fact, [the Paris 2024 website's main “responsibility” page includes a discussion on language misuse of “carbon neutrality”](#), and very accurately describes the need for the organisers to both address their own emissions while simultaneously investing in climate action support beyond the event.

The alterations of this claim over time, however, has created inconsistencies in Paris 2024 communications material. Carbon credit purchases were originally described on the Olympics website as ‘carbon neutral’, without any verification of this claim. Although the games have moved away from this description, updates were not made to the original text.

Similarly, the climate strategy described in the technical documentation is now outdated, detailing compensation of emissions through the purchase of carbon credits, and still communicates the feasibility of holding an Olympics with either no, or a positive, overall impact on the climate. There is also reference to ‘climate positivity’ in the [OECD Guidelines on the Effective Delivery of Infrastructure and Associated Services for the Olympic Games](#), another technical document describing the sustainability measures taken by Paris 2024 - “The Olympic Movement’s ambitious sustainability goals, including ensuring that all Games be climate positive from 2030, [...]”. This evolution in claims needs to be harmonised across previously published sources of information.<sup>3</sup>

3. Another example is [OECD Guidance](#) part 1, where the Paris 2024 effort to achieve carbon neutrality is manifested: “Paris 2024’s environmental strategy focuses on four main topics: 1) securing carbon neutrality [...]”

## Will the Paris 2024 Games be carbon neutral?

As set out by the ADEME since 2022, the concept of “carbon neutrality”, i.e. not emitting more emissions than the planet or a country can absorb, can only be applied on a global level or for a particular country. To contribute to carbon neutrality, all organisations must get involved in efforts to reduce levels and can support projects to combat climate change.

On its scale, Paris 2024 has set itself a target to halve the CO2 emissions linked to the event by taking action on all aspects of its organisation. For the emissions that cannot be avoided, the Organising Committee has chosen to fund projects helping combat climate change, while providing benefits for both communities and biodiversity. They include reforestation, forest conservation or renewable energy development projects.

In line with the ADEME recommendation for communicating on climate issues, Paris 2024 no longer uses the expression “carbon neutral” Games, although this does not mean that it has in any way scaled back its ambitions in this area.

[Learn more](#) →



# Paris 2024 target setting in technical documentation

There are three different technical documents setting out the climate strategy of the games: the Sustainability and Legacy Report, the Sustainability and Legacy Plan, and Interim Evaluation Report on the Legacy & Sustainability Strategy of Paris 2024. According to all documents, the focus is on delivering a “carbon neutral” event (and often a positive contribution) through the purchase of carbon credits that are supposed to compensate the games’ ‘unavoidable’ emissions. Across the three documents, the term “carbon neutral” is mentioned 27 times.

## Evolution of sustainability targets in public facing communication and technical documentation for the 2024 Olympic Games



### Technical documentation:

- Sustainability and Legacy Report, 2021
- Sustainability and Legacy Plan (n.d.)
- Executive Summary of sustainability and legacy report, 2023 Olympic Agenda 2020 (2021)

### Updated communication [2021-2023]

### Communication as of [15.04.2024]

“the first Games with a **positive contribution** to the climate” *Le Monde, 2023*

“While today all games are obliged to be **carbon-neutral**, from 2030 onwards, the IOC will oblige all games editions to be **climate positive**. Organisers will be required to reduce direct and indirect emissions of the games, compensate more than the remaining ones, and create lasting zero-carbon solutions. Paris 2024 has committed to achieving this goal already in 2024.”  
*Thomson Reuters Foundation article by Marie Sallois, January 2022*

“The Paris 2024 organising committee has set out to establish a new model for the Olympic and Paralympic Games, pledging to deliver an ambitious, spectacular, universal event that is more responsible, more sustainable, more united and more inclusive.” ([paris2024.org](https://paris2024.org))

“Faced with the greatest challenge humanity has ever known, the world’s largest event is taking on unprecedented responsibilities to limit the climate impact of the Games.” ([paris2024.org](https://paris2024.org))

“In line with ADEME’s recommendation on climate-related communications, Paris 2024 no longer uses the expression **“carbon-neutral”** Games, without lowering its ambitions in this area.” ([help.paris2024.org](https://help.paris2024.org))

“Guarantee **carbon-neutral** Games and support projects that have a positive impact on the climate.”

“To go further, the Organising Committee wants the Paris 2024 Games to be the first to have a **positive impact on the climate** by offsetting more emissions that they cause”  
*Sustainability and Legacy Report, 2021*

“Aligning Paris 2024 with the Paris Agreement, by halving greenhouse gas emissions and offsetting any residual emissions to achieve **carbon neutrality**”

“**GUARANTEEING A POSITIVE IMPACT** ON THE CLIMATE: A GROUND-BREAKING METHOD AND AMBITION”  
*Sustainability and Legacy Plan (n.d.)*

“Paris 2024 is participating in the United Nations “Race to Zero” campaign, a global initiative for those committing to **carbon neutrality**: participants must guarantee that they do not emit more greenhouse gases (GHGs) than they offset”  
*Executive Summary of sustainability and legacy report, 2023(2021)*

“Building on the work achieved to date, the Executive Board took the decision in March 2020 for the IOC to transition from being **carbon neutral** to be **climate positive** by end 2024.”  
*Olympic Agenda 2020(2021)*

## Opaque carbon credit purchases

The strategy of the games is based on ARO principles: avoid, reduce, then offset. This means that after decarbonising as far as possible, organisers will address residual emissions by funding 'climate friendly' projects in and outside of France. Offsetting typically refers to the purchasing of carbon credits, tradable units often promoted as counterweights to the emissions caused by an activity.

While offsetting aspects feature prominently in the technical documentation we analysed, details about which carbon credits have been or will be purchased by the Paris 2024 organising committee is lacking. The 2021 Sustainability and Legacy Report (p. 108) refers to support of both French and international projects that have a positive climate impact. According to Mandard (2023), the Paris 2024 committee aims to purchase carbon credits issued under the Verified Carbon Standard (VCS), and simultaneously support forestry, and agriculture projects in France through the national 'Label Bas Carbone' scheme. According to Mandard, tender for a very modest 35,000 tonnes of CO<sub>2</sub>e reductions is currently ongoing, but details could not be found in the Paris 2024 documents. The 35,000 tonnes in question represent a drop in the ocean compared to the 1.5 million tonnes of CO<sub>2</sub>e reductions or removals that the organisers aim to finance.

Beyond this general information, no further details could be identified regarding the types of projects that will be financed, or their location. Paris 2024 has mentioned a €15 million investment for carbon credit purchases, translating to a sum of €10 per tonne of CO<sub>2</sub> emitted. This is slightly higher than the average (very low) price of carbon credits on the voluntary carbon market today, but it is still multiple times lower than the price of carbon on the European Union Emissions Trading System, or projections of the social cost of carbon.

Missing the important details, this lack of transparency poses a significant barrier to public engagement with the games' environmental responsibilities, leading to a loss of accountability of the overall climate strategy. It is difficult to measure the impact of any finance provided by the games' organising committee, in the absence of credit purchase information.

## Encouraging communication but confusing nuances

The Paris 2024 public communication has clearly changed in line with how the public debate has progressed on the role of offsetting in climate action. Its current messaging sets a good example that can be followed by other initiatives: clearly outlining a commitment to taking responsibility for unabated emissions by financing action, while stopping short of claiming that the event will have no negative, or even a positive, impact on the climate. As highlighted in the Olympic Games Guidance on Sustainable Sourcing, public communication about sustainability should be legal, fair, honest and verifiable - a concept the organisers have clearly acknowledged, and now need to bring to the finish line.

Even though the neutrality claim has been left behind, organisers continue to pursue a misguided compensatory model in which each 1tCO<sub>2</sub>e emitted is then financed by carbon credits deemed equivalent to 1tCO<sub>2</sub>e. Emerging best practice - see for example guidance from [SBTI on Beyond Value Chain Mitigation](#) and Carbon Market Watch's [BVCM FAQ and disclosure templates](#) - is to fund projects based on the price of unabated emissions.

Rather than procuring credits to cover the volume of unabated tCO<sub>2</sub>e, the committee should show climate ambition, by committing to a specific volume of financing formula based on an internal carbon price and aligned with the 1.5°C objective. With this kind of contribution, the actor's commitment lies in financial support rather than trying to compensate for a scientifically inaccurate specific tonnage of emissions.

The adjustment of public claims demonstrates the organisers' willingness to acknowledge past missteps and pivot towards a more realistic approach rather than their initial misleading headline claims. Moving forward, it is imperative for Paris 2024 to ensure coherence between its claims and guidance, while also providing clear details about financed projects and the carbon pricing method applied.

## Responsible sponsorship

Although sponsors are not directly responsible for the event's carbon footprint, their association is a reflection of the credibility, or otherwise, of the games' climate commitment. Through advertising, billboards and communications, brands are awarded a prominent and influential platform to reach a captive audience. The corporate climate strategies of brands is potentially at odds with the climate exemplarity desired for this event.

In the official communications of Paris 2024, we were unable to identify whether the climate ambition of partners was a factor in informing sponsorship selection. The operations of all companies listed as 'Official partners', including Aeroports de Paris, ArcelorMittal, AirFrance, or AccorHotels, are incompatible with the objectives of the Paris Agreement. According to the 2021 Oxfam report "[CAC degrés de trop](#)",<sup>4</sup> a significant number of companies sponsoring the Games are bulldozing a climate-destructive pathway. Among the companies covered by Oxfam's analysis, only EDF is actively following a pathway compatible with the less ambitious 2°C goal of the Paris Agreement.

4. Oxfam France, CAC degrés de trop (2021). The title is a play of words based on "CAC40" (the benchmark French stock market index) and "quatre" (four), and translates to "Four degrees too many".

Company	Type	Climate pathway <sup>5</sup>
ArcelorMittal	Official Partner	Between 4°C and 4.5°C
AccorHotels	Premium partner	Between 3°C and 3.5°C
Air France	Official Partner	Between 3°C and 3.5°C
Danone	Official Partner	Between 3°C and 3.5°C
Saint-Gobain	Official Supporter	Between 3°C and 3.5°C
VINCI	Official Supporter	Between 3°C and 3.5°C
EDF	Premium partner	Less than 2°C

*Alignment score obtained by partners and supporters of the 2024 Olympics according to the methodology used in Oxfam's "CAC degrés de trop" publication (2021).*

It is a necessity that the Olympic Games, and all other major events, sever ties with unsustainable sponsors to uphold their commitment to principles of environmental sustainability and social responsibility. As long as sponsors do the bidding of the fossil fuel industry or engage in other harmful practices, the event remains associated with these activities. By aligning with sponsors who prioritise sustainable practices, the Olympics can set a positive example for high profile global events.

All future games must break from the status quo of associating with pollutant companies, and should actively seek sustainable sponsors that contribute positively to environmental and society benefiting aims. Sustainability is a fundamental principle that should be integrated into all layers of the event organisation - including air travel and sponsorship as well as electricity generation and construction.

5. Oxfam France defines their "Climate pathway" as "the translation, in degrees of warming, of a company's past and current greenhouse gas emissions, as well as its commitments to reduce its carbon footprint in the future. The climate trajectory is therefore not only the quantity of greenhouse gases emitted at a given moment, but also takes into account the actions already put in place (means) or the efforts announced (objectives) to reduce them, in the short, medium and long term." (Oxfam France, CAC degrés de trop (2021))





# En-route to future- proof Games

6

7

The future of the Olympic Games in a world striving to align with the essential 1.5 degree threshold requires the resolution of several important questions such as:

- Can we persist with incremental carbon footprint reductions?
- Is setting a standardised annual reduction pathway even fair, given that Global North nations already benefit from existing infrastructure accumulated whilst contributing more to climate change than those in the Global South?

To answer these questions in a just manner, we must consider a radical reimagining of the games. To truly align with a 1.5 degree future, we advocate for transformative alternatives that not only address emissions but also fundamentally reshape the games driven by principles of sustainability and equity. A more drastic change than the “new model” [advised by the Paris 2024 games](#) is required.

# How to set the carbon budget?

According to the IPCC, the Paris Agreement's 1.5°C pathway requires a reduction in global greenhouse gases by 43% from 2019 levels by 2030, to reach a state of net-zero emissions of all greenhouse gases by 2070.

Taking 2019 as the reference year for global emissions and adhering to global averages, the following targets for future games would be compatible with the 1.5°C objective of the Paris Agreement:

- For the 2028 event, a global GHG reduction of at least -35%
- For 2032, a global GHG reduction of at least -50%
- For 2036, a global GHG reduction of at least -60%

The different geographical contexts and capacities of future games locations are an important factor in 1.5°C target setting. Setting a uniform 1.5°C target is not as fair as requiring steeper emissions from high-income countries than for those below the global average income. Therefore, establishing a national "1.5°C fair share"<sup>6</sup> pathway for the specific host city and country should be considered. By doing so, the different economic contexts of countries would be taken into account to quantify their fair contribution to the global effort to reduce greenhouse gas emissions. For instance, pre-existing high-quality infrastructure may radically differ between host cities. Comparing London to Paris makes sense, but comparing London to Rio less so.

This "1.5°C fair share approach" would only apply to the domestic emissions categories of the games (on-site transportation, new construction, direct energy consumption). However, for global emissions categories, such as international transport, using the IPCC's global-level decarbonisation pathway as a reference point is relevant.

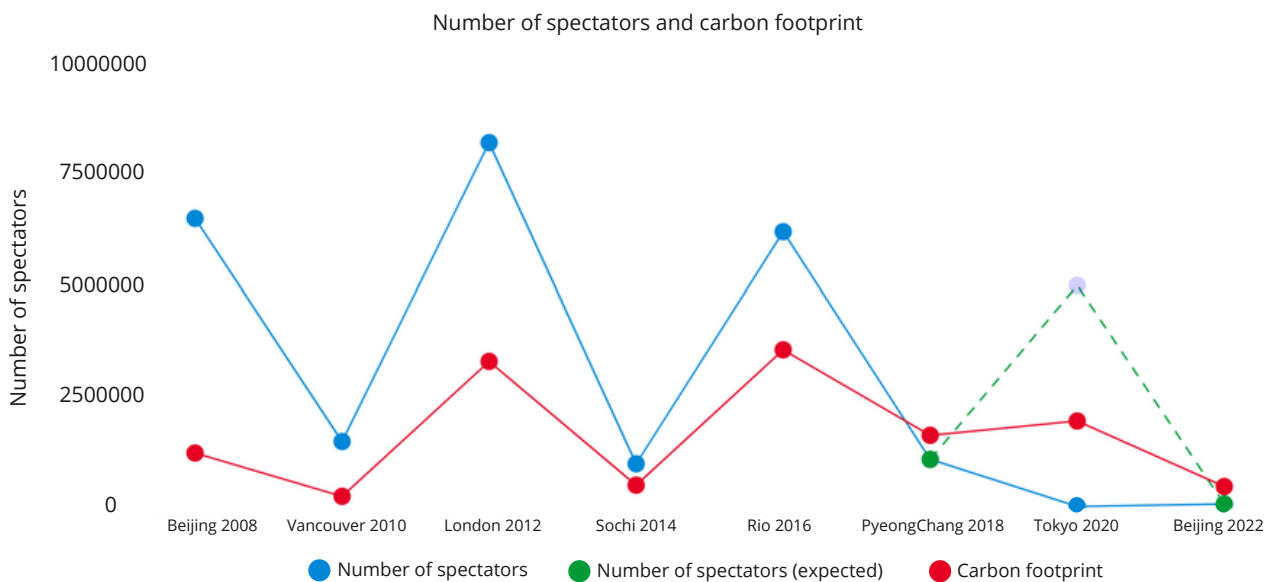
These suggested approaches are not intended to be prescriptive, but rather illustrate what to expect from a normative and just IOC framework. This framework should also distinguish between the winter and summer games, which have different organisational demands. For example, winter games historically attract fewer visitors, but require more new purpose-built infrastructure than the summer equivalent, due to the specialised venues required for the respective disciplines.

Setting a carbon budget compatible with the Paris Agreement is only the first step, and must be supported by additional radical transformations. It will be challenging for games to respect the 1.5°C carbon budget due to factors such as hard-to-abate emissions from aviation. Therefore a deep transformation and fundamental rethinking of the structure of games is required, and one option is presented below.

6. For an illustration of what could be considered a national "fair share" contribution to the global effort in reducing greenhouse gas emissions, see the Climate Action Tracker methodology: <https://climateactiontracker.org/methodology/categorating-methodology/fair-share/>

# Rethinking the Olympic concept

The most significant factor affecting the games' environmental footprint is its enormity,<sup>7</sup> influenced by numbers of spectators and sporting events, scale of the welcoming ceremony, sizes of sports stadia, and all taking place at more or less the same location at the same time.



*This graph demonstrates the correlation between the spectators in attendance and the carbon footprint of each Olympics since 2008.*

Hosting millions of spectators at the same time and in one place, even in cities such as Paris or London with existing high-quality infrastructure, strains accommodation and local transportation capacities. Even when most of the required infrastructure already exists, holding such an event generates massive greenhouse gas emissions. The more visitors, the greater the emissions. For example, more international trips take place (and in particular air travel, the most carbon-intensive means of transportation), there is increased use of local transportation and logistics, and higher volumes of energy and food are consumed. Hosting so many spectators generally requires the construction of new buildings and infrastructure, which become often less relevant post-event.

If the Olympic Games really wish to commit to a “new model”,<sup>8</sup> shifting away from one that is unsustainable in the long term, the first priority must be to downscale. Reducing disproportionate investments into short-life infrastructure is key to redressing the sustainability and legacy at the heart of the games.

7. As Martin Müller et al. point out in their Evaluation of the sustainability of the Olympic Games (2021): “The number of visitors is a major driver of the ecological and material footprint of the Olympic Games. Ceteris paribus, a higher number of visitors increases both the size of the facilities required (stadia, hotels, transport) and the number of trips, often via plane”.

8. CTRL+F “new model”: 5 times in S&L report, 7 times in S&L plan.

We propose an alternative model to the conventional construct of the games:

**Spread disciplines over different countries and restrict physical access to attendees who can reach the games over land, in order to limit international travel while enabling more people to attend in-person**

This model radically rethinks the modern and normalised games construct that all sports must be showcased in one place. This alternative could bring to zero the number of carbon-intensive spectators that travel by air, in favour of enhanced participation from local attendees. By spreading out the various competitions across the world, and therefore downsizing one event into multiple sub-events, heavy emissions sources are tackled without hampering the cultural magnitude of the games.

Highly polluting international spectator travel would be cut, while diversifying and potentially increasing the number of people who can attend Olympic competitions. Besides, the amount of new-build infrastructure needed would decrease since no single city would be asked to provide all of the necessary infrastructure for all of the Olympic sports. Other emissions, such as those from food waste, will take on smaller dimensions since the management burden decreases in line with the downsizing of the event.

When you consider that surfing competitions of Paris 2024 are taking place in Tahiti, or sailing competitions in Marseille, this proposed model is not even such a radical transformation.

For each sporting activity or group of activities, there could be a pool of applicant hosts determined by a democratic process (e.g. raffle or bidding system), so that the most popular sports don't always end up hosted in the same location. As an illustration, it could mean athletics events held in Mexico City, aquatic sports in Buenos Aires, team sports in Nairobi, combat sports in Seoul, racquet sports in Warsaw, cycling sports in Ankara, gymnastics in Jakarta, and so on - provided the required infrastructure already exists in the city. For the following editions, the list of host cities could be renewed and the sports competitions reassigned, either at random or not.

One significant advantage of this proposal is to increase inclusivity by offering the possibility for more than only mega cities to host Olympic Games. Another advantage would be the increased accessibility of the games. The thrill of attending an Olympic competition in-person could become much more frequent for many people. With host cities being less overwhelmed, not only the climate, but also local populations would benefit.

Of course, other alternative models that respect the parameters of the Paris Agreement might work. The objective of this proposal is to start a discussion, rather than advocate a silver bullet approach.



# Conclusion

The imperative for a radical transformation of the Olympic Games is undeniable. The Paris 2024 organisers' assertion that we need a 'new model' underscores the urgent need for a departure from the status quo.

Whether through downsizing, or the establishment of an external committee prescribing best practices, the essential solutions must be guided by principles of maintaining fairness and an alignment with the 1.5°C Paris Agreement temperature threshold.

By embracing alternative models and communicating clearly about progressive actions taken, the games have the potential to revolutionise climate communication, as Paris 2024 organisers have shown in moving from a narrative of misleading absolutes to an honest, nuanced dialogue about estimated impacts.

The Olympic Games can become a symbol of responsible climate stewardship by acknowledging their environmental footprint without resorting to claims of carbon neutrality or positive contribution. Instead, the impact the event has on the planet must be acknowledged, and then properly mitigated, if the objective to demonstrate a commitment to sustainability is genuine and sincere. This will be realised by confronting the inconvenient truth for the Olympic Games: its contribution to global climate change and that it is by no means immune to the consequences.

Genuine action is needed. In their approach to communication and in their overall approach to a sustainability strategy, this year's games have already set a positive precedent. Yet, in opening this honest discourse about the climate impact of the Olympics it is clear there is potential for even greater transformation. The question remains whether the International Olympic Committee will exhibit the bravery and leadership to enact that substantial change.



## Authors

**éclaircies** (Cesar Dugast, Antoine Crepel, Guillaume Kerlero de Rosbo, Alexandre Joly)  
**Carbon Market Watch** (Benja Faecks, Gilles Dufrasne)

## Editor

Gavin Mair, Communications Officer

## Cover design and layout

Noemí Rodrigo Sabio, Communications Officer

## Photo credits

Microgen, Luca Dugaro , Jonathan Chng, Miguel Machado, Zhang Kaiyv

## CONTACT

### César Dugast

Co-founder - éclaircies

[cesardugast@gmail.com](mailto:cesardugast@gmail.com)

### Benja Faecks

Policy Expert - Global Carbon Markets

[benja.faecks@carbonmarketwatch.org](mailto:benja.faecks@carbonmarketwatch.org)

### Gilles Dufrasne

Policy Lead - Global Carbon Markets

[gilles.dufrasne@carbonmarketwatch.org](mailto:gilles.dufrasne@carbonmarketwatch.org)