

badvertising

Olympic Smoke Rings

How the climate polluting sponsors using the Paris Olympic and Paralympic Games for self-promotion will increase emissions





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Summary



The 2024 Paris Olympics and Paralympics aim to be the greenest games yet, but are being sponsored by several major polluters who consistently oppose action on climate change and cutting air pollution. Such glaring contradictions echo the days when tobacco companies were common sponsors of sport. It is possible to calculate how much more pollution results from money spent by polluting companies on sponsorships. We estimate these additional emissions for every euro (€) / pound (£) of leading polluting sponsors of the Paris 2024 Olympic Games: **Air France**, **Toyota** and steelmaker **ArcelorMittal**.

Sponsor	kg CO2e/sponsor €	kg CO2e/sponsor £
Air France	38.5	45.5
ArcelorMittal	27.1	32
Toyota	37.6	44.5

Using publicly available figures and estimates based on known Olympic sponsorship deals we calculate that combined, through the promotion of high carbon products and services such as flights and cars, these three sponsorship deals alone could be responsible for more than an additional 30 million tonnes of CO2e, with Toyota being by far the biggest polluter (see appendix for methodology). Not only does this amount to sportswash for major polluters, the global heating it worsens threatens the future sport, and makes the Games famous logo look more like Olympic smoke rings in the sky.

Sponsor	Annual emissions (thousand tonnes CO2e)	Sponsorship emissions (thousand tonnes CO2e)
Air France	80,866	2,686
ArcelorMittal	120,800	1,891
Toyota	575,730	29,037
Total	777,396	33,614¹

This Badvertising report seeks to draw attention to the contradiction at the heart of the Paris 2024 Olympics and Paralympics, as well as future Games. The Games' ambitious plans on decarbonisation and climate action are being undermined by its polluting commercial partners, who seek to delay and derail climate policy.

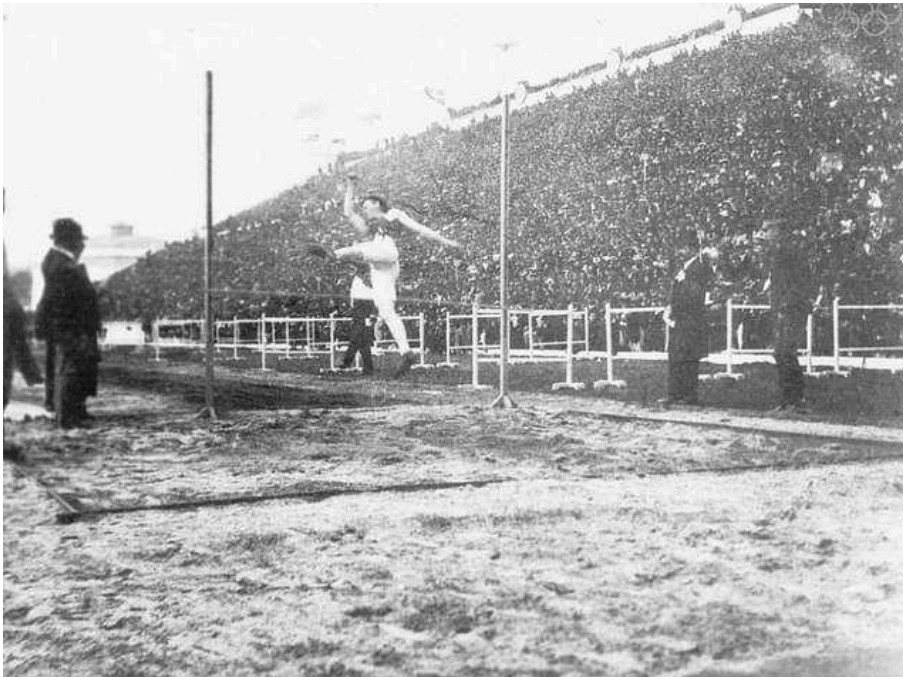
The 2024 Olympic Games sponsorship deals of Toyota, ArcelorMittal, and Air France will generate more pollution than the combined emissions of eight coal plants running for an entire year.²

Here we highlight the climate impacts of these sponsors and the instances where their lobbying activities have sought to slow the pace of climate action, and where their operations reportedly have infringed on human rights. The briefing concludes with recommendations to the IOC that reflect what the Olympic movement must do to live up to its moral rhetoric amidst a worsening climate crisis.

¹ The total emissions resulting from the polluting sponsorship deals of the Paris Games amounts to 95.8% of the annual emissions of Bełchatów, Europe's largest coal-fired power plant: <https://ember-climate.org/insights/research/eu-ets-2022/>

² The average coal-fired power plant in the United States emits 4.3 million tonnes of CO2 annually: <https://ember-climate.org/insights/research/eu-ets-2022/>

Olympic Struggles



Men's high jump in 1896, the first modern Olympic Games in Athens

There is nothing quite like it. The Olympic and Paralympic Games are the most lauded of all global sporting events, with a history stretching back to 776 BC, and the modern games to the late 19th century.

The exact reason for its creation is still the topic of disagreement amongst historians and archaeologists. The modern games have mirrored wider social and political changes, emerging from inglorious periods in which women and working class athletes were actively excluded, and deeply colonial attitudes were entrenched. But the Games' clearly stated purpose today in an increasingly polarised and uncertain world is to bring people together in a celebration of sport and international community - and to do so with exemplary environmental credentials.

Through the universal language of sport, the Games sets out to connect us with each other, it allows us to feel intense emotions, and celebrates the apex of physical achievement. It is a sporting feast of gargantuan proportions with a global audience to match.

But despite its ancient history, the Olympic Games have had to move with the times. The Games have had to navigate

natural disasters, the eruption of violence, genocidal regimes, and cultural changes that have taken place around the world. Now, in 2024, it is beginning to stare down one of the greatest upheavals of the 21st century: the planetary crisis of global heating and ecological catastrophe.

The impacts of these twinned crises are now unignorable and unavoidable. Deadly heat, devastating floods and shifting precipitation patterns that are undermining the very infrastructures that human civilization depends upon. Given the limited progress in phasing out fossil fuels made to date, and the insistence of governments to open up new sites of extraction, the impacts of climate breakdown are set to become more frequent and severe. The future of the Olympics - and all sport - is looking increasingly precarious.



© Wikimedia Commons/Anne Jea

This is the context in which the Paris 2024 Olympic Games finds itself. As a vast sporting event, it will be responsible for a substantial amount of carbon emissions. According to Carbon Market Watch, the sustainability strategy for the Paris Games “is incomplete, and falls short of achieving transparency” as it “lacks detailed methodologies and comprehensive monitoring”.³ Crucially, the same report notes that the Paris 2024 “sponsors are not climate leaders and the absence of climate criteria when selecting sponsors

³

<https://carbonmarketwatch.org/wp-content/uploads/2024/04/Going-for-green-Olympics-report.pdf>

is a missed opportunity to influence large companies”.⁴ Without a doubt, the International Olympic Committee (IOC) is guilty of partnering with major polluters.



© UN Photo/Mark Garten

Paris hosting these games is symbolic on many fronts. The French capital was where the landmark UN Paris Agreement was signed in 2015, which forever changed the direction of climate policy and continues to provide the framework for action to this day. More recently, Paris has become a global leader in sustainable transformations, pushing cars out of the city centre and becoming a cycling heaven. In just over a decade, cycling has gone from a fringe activity in the French capital to now outnumbering car journeys in the city centre.⁵

But it is for these reasons, and many more, that the continued presence of polluting sponsors at the Games is deeply problematic. As a cultural phenomenon that brings together people from all over the world in a shared experience, the power of the Olympics to stimulate climate action cannot be discounted. Yet by allowing these airlines, car manufacturers and global steel producers, with their vast environmental footprints, to leverage the spirit, allure and imagery of the Olympics is a dereliction of duty to athletes and fans alive today and those yet to be born. Through the Olympics, these companies will have unrivalled prominence and influence in front of a captive audience of billions.

⁴ Ibid.

⁵

<https://www.euronews.com/green/2024/04/12/cycling-is-now-more-popular-than-driving-in-the-centre-of-paris-study-finds>

Gaming Pollution



The Olympics and Paralympics – both the summer and winter games – have a long and chequered history with major polluters. Since 2004, despite the well-established scientific facts about global warming and the catastrophic impact of burning fossil fuels, the Games have promoted seven of the world's largest oil and gas companies, seventeen global manufacturers of fossil fuel-dependent cars and other vehicles, eight international airlines, one leisure air travel organiser, and one private jet manufacturer.

These companies are responsible for a large part of global heating. The promoted oil and gas companies have released 5.5% of global CO₂-emissions between 1988 and 2015. The car manufacturers build and sell well over 40% of the global car stock and the endorsed airlines transport about 325 million passengers per year at a huge cost to the climate.

The Paris 2024 Games fails to break with the past. Despite the lofty ambitions of the IOC, the official partners of the 2024 Games include ArcelorMittal and AirFrance, while Toyota remains a Worldwide Olympic Partner. The continued alignment with these polluters damaged the credibility of the IOC's sustainability strategy and climate ambitions.⁶ While Paris 2024 should be a celebration of the apex of athleticism and human endeavour, it will be remembered for filling the podium with polluting sponsors. Amid a climate crisis, the IOC can and must do better.

⁶

<https://carbonmarketwatch.org/wp-content/uploads/2024/04/Going-for-green-Olympics-report.pdf>

Paris 2024: Fossil Fuel Olympic Flames



Air France



© Flickr/Mark Harkin

The French airline, Air France, is a leading sponsor of the Paris 2024 games and, according to their website, was a vocal supporter of Paris' bid to host the games from 2016 onwards.⁷ Formed in 1933, Air France merged with Dutch airline KLM Royal Dutch Airlines in 2003 to form Air France-KLM. Air France has a number of subsidiaries, including Transavia France and Air France Hop.

*Carbon footprint for the year 2023 in thousand tonnes CO₂e:*⁸

Scope 1	Scope 1 Non-CO ₂	Scope 2	Scope 3	Total
24,681	49,362* ⁹	60.2	6763	80,866

Air France's total revenue for fiscal year 2023 was € 30,019 million.¹⁰

⁷ <https://www.airfrance.fr/en/information/air-france-partenaire-officiel-paris-2024>

⁸ AirFrance, 2024., 'Universal Report 2023', p. 299, https://www.airfranceklm.com/sites/default/files/2024-04/af_urd_2023_uk_vme12_260424.pdf

⁹ The methodology for scope 1 non-CO₂ emissions due to the radiative forcing effect of the aviation industry can be found here:

<https://www.badverts.org/airline-sponsorships-emissions-briefing>

¹⁰ ArcelorMittal, 2024, 'ArcelorMittal reports fourth quarter and full year 2023 results', <https://corporate.arcelormittal.com/media/press-releases/arcelormittal-reports-fourth-quarter-and-full-year-2023-results>

Based on Air France’s reported carbon footprint and its reported total revenue we can calculate that each sponsorship deal with Air France will generate emissions of 38.5 kg CO₂e per sponsor €, or 45.5 kg CO₂e per sponsor £.

The exact value of Air France’s sponsorship deal with Paris’s Organising Committee of the Olympic Games has not been released publicly. We can, however, estimate the value of the ‘Official Partners’ sponsorship tier of the Paris Games by referring to the mid-tier of the 2021 Tokyo Games and the 2028 Los Angeles Games. Industry experts have reported that mid-tier sponsorship deals of the Tokyo and Los Angeles Games are in the region of US\$50 million¹¹ and US\$100–150 million¹², respectively.

By taking a conservative median of these figures, we can estimate that the value of ‘Official Partner’ sponsorship deals at the Paris Games are likely to be in the region of \$75 million or €69.8 million. Using the above CO₂e per sponsor €, this means that the emissions resulting from the deal are **2,686,270 tonnes of CO₂e.**

Air France has a chequered relationship with climate action and environmental policy. Although the airline has made a number of supportive statements about the need for greater ambition on climate, such as supporting calls for greater investment into the European rail network,¹³ they continue to lobby against higher taxes or decarbonisation initiatives within the aviation sector. For instance, Air France–KLM CEO Ben Smith has argued that an EU kerosene tax would “have a negative impact on Europe’s air transport sector” – although the airline has since softened its stance on a kerosene tax.¹⁴ In the Netherlands, Air France–KLM strongly fought the proposed flight cap at Schiphol airport and initiated legal action against the measure.¹⁵

¹¹

https://www.sportspromedia.com/news/tokyo_2020_secures_asahi_as_second_domestic_gold_partner/

¹² <https://www.sportsbusinessjournal.com/Articles/2024/01/29/olympics>

¹³ <https://lobbymap.org/evidence/9d49ea68b34140cdaf943212b577b962>

¹⁴

<https://lobbymap.org/company/Air-France-KLM-a93f0fff3b302d582d4a156eab9ed99f>

¹⁵ Ibid.

Toyota



Toyota reports its scope 1-3 emissions and includes category 11 scope 3 in its reporting, the emissions from the use of sold products.

Carbon footprint for the year 2023 in thousand tonnes CO₂e:¹⁶

Scope 1	Scope 2	Scope 3	Total incl non-CO ₂
2,370	2,800	570,490	575,730

Toyota's total revenue for fiscal year 2022 was €218,467 million.¹⁷

Based on Toyota's reported carbon footprint and its reported total revenue we can calculate that each sponsorship deal will generate emissions of 37.6 kg CO₂e per sponsor €, or 44.5 kg CO₂e per sponsor £.

Based on Toyota's reported carbon footprint and its reported total revenue we can calculate that each sponsorship deal will generate emissions of 37.6 kg CO₂e per sponsor €, or 44.5 kg CO₂e per sponsor £.

¹⁶ https://global.toyota/pages/global_toyota/sustainability/report/sdb/sdb23_en.pdf

¹⁷ https://global.toyota/pages/global_toyota/ir/financial-results/2023_4q_summary_en.pdf

The value of Toyota's sponsorship deal with the IOC is reported to be € 772,249.75 million.¹⁸ Using the above CO₂e per sponsor €, this means that the emissions resulting from the deal are **29,036,590 tonnes of CO₂e**.

Japanese car manufacturer, Toyota, is the largest automobile company in the world and major commercial partner within the global sports industry.¹⁹ As well as being the biggest car maker in the world by sales, Toyota is also a leader in emissions, greenwash and climate delay. Behind its positive, future-oriented marketing and headline sports sponsorship deals, Toyota boasts annual CO₂ emissions higher than most oil and gas companies,²⁰ including British Petroleum (BP).²¹ Toyota's own production plans will see the company overshoot Paris-aligned emissions targets by as much as 184%.²² By 2040, Toyota is planning to sell 110 million ICE vehicles. The total emissions from these vehicles over their lifetime will be in the region of 7.4 billion tonnes of CO₂, which is equivalent to running more than 2,000 coal-fired power plants for an entire year.²³

Toyota is regularly ranked amongst the worst car makers globally for action on climate change, including being ranked worst of all car makers for electric vehicle (EV) preparedness,²⁴ and coming third from bottom in Greenpeace's annual auto rankings behind Suzuki and Great Wall.²⁵ Toyota has also been active in pushing back against climate policy in France, the host nation of the next Olympic Games. In the wake of the EU announcing its 2035 phase-out date for ICE cars, Toyota used a private meeting with President Macron of France to ask for an extension in the sale of ICE-powered hybrids within the EU.²⁶

¹⁸

<https://apnews.com/article/toyota-olympics-paris-2024-sponsorship-f02abe0a660f44546d5e702ac7e60291>

¹⁹ Badvertising, 2023, 'Dangerous Driving',

<https://static1.squarespace.com/static/5ebd0080238e863d04911b51/t/6463a213e66f4a0215bfe389/1684251158245/Dangerous+Driving+%281%29.pdf>

²⁰ https://global.toyota/pages/global_toyota/sustainability/report/sdb/sdb23_en.pdf

²¹

<https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/investors/bp-net-zero-progress-update-2023.pdf>

²² https://www.greenpeace.de/publikationen/ICE-Bubble_2.pdf

²³ Badvertising, 2023, 'Dangerous Driving',

<https://static1.squarespace.com/static/5ebd0080238e863d04911b51/t/6463a213e66f4a0215bfe389/1684251158245/Dangerous+Driving+%281%29.pdf>

²⁴ <https://theicct.org/publication/the-global-automaker-rating-2022-may23/>

²⁵ <https://www.greenpeace.org/international/act/drive-change/>

²⁶ Badvertising, 2023, 'Dangerous Driving',

<https://static1.squarespace.com/static/5ebd0080238e863d04911b51/t/6463a213e66f4a0215bfe389/1684251158245/Dangerous+Driving+%281%29.pdf>

Led from the top by former CEO and now chairman Akio Toyoda,²⁷ Toyota has been a prominent critic of EVs and routinely pushed the untruth that hybrids (which still rely on fossil fuels) are a better choice for drivers and for the planet.²⁸ To date, Toyota offers just one battery electric vehicle, the bZ4X. In 2023, less than 1% of Toyota's total global sales were battery EVs, while hybrids made up 35% of all sales.²⁹ Not only is this bad environmentalism, it's also bad business. Toyota finds itself way behind the curve on transitioning to EVs and risks getting wiped out, fuelling widespread concern amongst its major shareholders.³⁰

Toyota has aggressively and consistently lobbied against climate action³¹ in countries around the world.³² In the UK, Toyota has been a vocal opponent of the government's zero emissions vehicle mandate, going so far as to threaten to end UK manufacturing if the mandate was not dropped.³³ More recently, Toyota was actively lobbying against the mandate in the months up to Rishi Sunak announcing a delay to the phase-out of petrol and diesel cars from 2030 to 2035.³⁴

²⁷

<https://www.cnbc.com/2022/10/02/toyota-ceo-akio-toyoda-electric-vehicles-happy-dance.html>

²⁸

<https://electrek.co/2023/10/30/why-is-toyota-anti-ev-it-lost-the-race-to-compete-ev-council/>

²⁹

<https://electrek.co/2023/12/27/toyota-november-ev-sales-doubled-amid-record-month/>

³⁰

<https://thedriven.io/2023/06/13/time-to-go-electric-toyota-faces-shareholder-revolt-and-calls-for-board-shakeup/>

³¹

<https://lobbymap.org/company/Toyota-Motor/EN/projectlink/Toyota-Motor-In-Climate-Change>

³²

https://www.greenpeace.org.au/wp/wp-content/uploads/2022/09/GREENPEACE-Under-The-Hood_The-Truth-About-Toyota-v1.pdf

³³

<https://www.telegraph.co.uk/news/2022/07/30/toyota-warns-government-may-stop-manufacturing-uk-bans-hybrid/>

³⁴

<https://www.gbnews.com/lifestyle/toyota-zero-emission-vehicle-mandate-concerns>

ArcelorMittal



© Flickr/JJ Hall

ArcelorMittal reports its scope 1-2 emissions but only includes categories 1 and 2 of its scope 3 emissions. The company's scope 3 reporting is very limited, excluding categories where there would likely be significant emissions: upstream transportation and distribution; the use of its sold products; and end-of-life treatment of sold products.

Carbon footprint for the year 2023 in thousand tonnes CO₂e:
³⁵

Scope 1	Scope 2	Scope 3	Total
108,000	6,400	6,500	120,800* ³⁶

ArcelorMittal's total revenue for fiscal year 2023 was US\$ 68,275 million or € 63,636 million.³⁷

Based on ArcelorMittal's reported carbon footprint and its reported total revenue, we can calculate that each

³⁵ ArcelorMittal, 2024, 'Fact Book 2023, p. 29, <https://corporate.arcelormittal.com/media/shgb4sw5/arcelor-mittal-fact-book-2023.pdf>

³⁶ This is the rounded total emissions figure reported in ArcelorMittal's Fact Book.

³⁷ ArcelorMittal, 2024, 'ArcelorMittal reports fourth quarter and full year 2023 results', <https://corporate.arcelormittal.com/media/press-releases/arcelormittal-reports-fourth-quarter-and-full-year-2023-results>

sponsorship deal with ArcelorMittal will generate emissions of 27.1 kg CO2e per sponsor €, or 32 kg CO2e per sponsor £.

The exact value of ArcelorMittal's sponsorship deal with Paris's Organising Committee of the Olympic Games has not been made public. The company is, however, in the same 'Official Partner' sponsorship tier as Air France, meaning that its deal is also likely in the region of \$75 million or € 69.8 million.

Using the above CO2e per sponsor €, we estimate that the emissions resulting from the deal are **1,890,855 tonnes of CO2e**.

Luxembourg-based ArcelorMittal is a major polluter. As the second largest steel manufacturer in the world with a considerable mining arm, its operations are spread over 20 countries, across Europe, the Americas, Africa, and Asia. It's a truly global entity – and its environmental footprint reflects its scale and reach: in 2023 ArcelorMittal was responsible for **114.3 million tonnes of CO2 equivalent**. This is comparable to the annual emissions of the wealthy, industrialised nation of Belgium.³⁸

Despite making various pledges and sustainability pledges, the steel giant is currently falling well short of what is required to hit its own decarbonisation targets by 2050. In fact, as SteelWatch notes, ArcelorMittal does not have scientifically-validated CO2 emissions reductions targets in alignment with a 1.5°C climate scenario and continues to rely on coal-based steel production.³⁹ This lack of progress has not stopped ArcelorMittal **accepting around €3.5 billion in public subsidies to stimulate decarbonisation**.

At the same time, ArcelorMittal has vociferously lobbied against climate policy and tighter environmental regulation. The company has consistently argued for weaker emissions trade regulations with the EU, lobbied against a carbon tax in South Africa, and argued for the inclusion of blast furnaces without carbon capture technologies in the EU's Green Steel

³⁸

https://steelwatch.org/wp-content/uploads/2024/05/SteelWatch_ArcelorMittal_MAY-2024.pdf

³⁹ Ibid.

classification system.⁴⁰ It seems that ArcelorMittal is happy to accept public money to accelerate emissions cuts, while lobbying behind the scenes to weaken climate policy.

It seems the steel giant is far more interested in rewarding shareholders rather than achieving its own decarbonisation targets. According to SteelWatch, between 2021 and 2023, the company funnelled more than \$11 billion to its shareholders through dividends and buybacks.⁴¹ **This is approximately 22 times the amount invested on decarbonisation during this same period - a meagre \$500 million.**⁴²

ArcelorMittal is also alleged to be complicit in human rights abuses and deadly levels of environmental pollution. Violence has erupted around ArcelorMittal's iron ore mines in Mexico, where Indigenous communities have been displaced and community leaders and environment defenders have been threatened, killed or disappeared when they have raised demands over ArcelorMittal's operations.⁴³ In South Africa, where ArcelorMittal is the country's third largest corporate emitter, the Vanderbijlpark steel plant emits deadly daily doses of hydrogen sulphide that exceed national air quality standards by some margin.⁴⁴

Despite this litany of alleged crimes against people and planet, ArcelorMittal remains a leading sponsor of the Paris 2024 Games and will manufacture 2,000 Olympic torches across a number of its French facilities, "selected for their ability to produce steel with a reduced carbon footprint".⁴⁵

⁴⁰ <https://lobbymax.org/company/ArcelorMittal-c6dfbde97d6da50fe5027ac1534b42f6>

⁴¹ Ibid.

⁴² Ibid.

⁴³ <https://edlc.org/wp-content/uploads/2024/04/The-Real-Cost-of-Steel.pdf>

⁴⁴ Mutsila, L. (2023, August 17). Eco-Activist Take Environment Minister and ArcelorMittal to Court As Vaal Residents Choke on Polluted Air. Retrieved from: <https://briefly.co.za/south-africa/166516-eco-activist-environment-minister-arcelormittal-court-vaal-residents-choke-polluted-air/>

⁴⁵ <https://olympics.com/en/paris-2024/the-games/the-brand/torch-design>

Going for Gold



© Wikimedia Commons/Nagarjun Kandukuru

Without a doubt, the future of the Olympic and Paralympic Games are threatened by climate breakdown. From extreme heat to deadly floods, the infrastructure of the Games will buckle under the impacts of global heating and its global scope will be radically reduced.

But this future is not locked in - it can be changed. The Games could be a powerful vehicle for ambitious action on climate change, using the universal language of sport to transcend borders, languages, and geopolitics. The Olympics and Paralympics could be vital in humanity's efforts to stop climate catastrophe.

To act with the urgency that the climate crisis requires, the IOC must:

1. Cut all ties with polluting sponsors that are undermining the future of the Games and the Olympians and Paralympians that make it the spectacle it is.
2. Integrate the emissions associated with each sponsor and corporate partner into the Games' sustainability strategies and encourage national committees to do the same.

Annex: Calculating the climate impact of a marketing investment



Aviation emissions

Global aviation operations contribute to anthropogenic climate change via a complex set of processes that lead to net surface warming. Most important are aviation emissions of carbon dioxide (CO₂), nitrogen oxides (NO_x), water vapour, soot and sulphate aerosols, as well as increased cloudiness due to contrail formation.

There is not yet an absolute consensus on the size of the non-CO₂ effects, but applying a generally accepted “best available scientific evidence” approach, these effects account for approximately two-thirds of the aviation net effective radiative forcing,^{46,47} a proportion that is also accepted by the aviation industry.⁴⁸

Accordingly, we have used a multiplier of 2 to account for the non-CO₂ effects in this briefing. In other words, an amount twice the size of the disclosed direct emissions of CO₂e (Scope 1) is added to the direct emissions.

This sum, taken together with reported scope 2 and 3 emissions are used to calculate the total climate impact of the airlines’ operations.

$$\text{CO}_2\text{e}_{\text{Scope 1}} + (2 \times \text{CO}_2\text{e}_{\text{Scope 1}}) + \text{CO}_2\text{e}_{\text{Scope 2}} + \text{CO}_2\text{e}_{\text{Scope 3}} = \text{total CO}_2\text{e emissions}$$

Knowing a company’s total emissions of greenhouse gases makes it possible to calculate how much extra CO₂e a certain investment, including investments into sponsorships,

⁴⁶ David Lee, D.W. Fahey, A. Skowron et. al.: The contribution of global aviation to anthropogenic climate forcing for 2000 to 2018, Atmospheric Environment, Volume 244, 2021.

<https://www.sciencedirect.com/science/article/pii/S1352231020305689>

⁴⁷ COMMISSION STAFF WORKING DOCUMENT, Full-length report, Accompanying the document, Report from the Commission to the European Parliament and the Council, Updated analysis of the non-CO₂ climate impacts of aviation and potential policy measures pursuant to EU Emissions Trading System Directive Article 30(4), {COM(2020) 747 final}, 23 November 2020.

https://eur-lex.europa.eu/resource.html?uri=cellar:7bc666c9-2d9c-11eb-b27b-01aa75ed71a1.0001.02/DOC_1&format=PDF

⁴⁸ Sesar: CICONIA - Cracking the non-CO₂ conundrum.

<https://sesarju.eu/news/ciconia>

advertising and commercial partnerships, is likely to generate.

When a company makes a decision about an investment, for example whether to invest in a sponsorship agreement or an advertising campaign or not, the company has to weigh the present costs against future profits. This is not an easy task as there are always many unknown factors at play but in the end, no sound corporate executive would allow a cost that is not expected, sooner or later, to produce a reasonable return.

The investment not only needs to increase the revenue with the same amount, as the income will first have to pay for the increased production costs. It will also have to generate a profit of a certain size.

So, what is a reasonable return? The lowest rate of return a project or investment must achieve before a manager or investor deems it acceptable is called the hurdle rate or the minimum acceptable rate of return. The hurdle rate is company specific and is influenced by factors such as cost of capital, alternative opportunities and risk.

Profit margins will be different between branches, between companies and even over time for the same company. No one knows what the profit margin of any given company will be the next year or the year after but it is a quite reasonable assumption that any company will expect its profit margin to be equal to its cost of capital as a minimum.

A common way to determine a minimum hurdle rate is to use the Weighted Average Cost of Capital (WACC).⁴⁹ The WACC represents a company's average after-tax cost of capital from all sources, including common stock, preferred stock, bonds, and other forms of debt. In other words, any investment with a return below WACC would be a bad investment.

The WACC is also company specific and may vary with time and circumstances. However, an analysis of available data shows that WACCs, at least in OECD countries, have a tendency to aggregate around 7 percent.⁵⁰ KPMG makes a very thorough assessment of WACCs in the German speaking

⁴⁹ Corporate Finance Institute: Hurdle Rate Definition.

<https://corporatefinanceinstitute.com/resources/valuation/hurdle-rate-definition/>

⁵⁰ KPMG: Cost of Capital Study 2023.

<https://kpmg.com/de/en/home/insights/2023/10/cost-of-capital-study-2023.html>

countries of Europe surveying 322 companies in Germany, Austria and Switzerland. The 2023 issue shows a spread in yearly averages between 6.6 and 8.8 percent with a ten year average of 7.1 percent. In a 2023 report, 18 investment bank Morgan Stanley assesses the WACC of the companies included in the Russell 3000 over a period from 1985 to 2022. The average is 7.9 percent but the curve is slightly declining.⁵¹

In January 2024, the New York University Stern School of Business made a very wide assessment of the cost of capital for 6,481 US based companies, determining the average cost of capital for the total market at 7.00 percent.

According to the OECD, the WACC for major oil companies as well as for the automobile industry oscillates around seven percent.⁵²

This briefing uses an expected WACC of seven percent in all its calculations.

A general formula to calculate emissions per sponsorship for a specific company can thus be expressed as:⁵³

$$\frac{CO2e}{EURsp} = \frac{CO2etot}{(WACC \times REVtot)}$$

where:

CO2etot = the combined (scope 1, 2 and 3) yearly carbon dioxide equivalent emissions²¹ of the company;

WACC = the Weighted Average Cost of Capital, estimated to be 7.0%;

REVtot = the company's gross revenue.

⁵¹ Michael J. Mauboussin, D. Callahan: Cost of Capital, A Practical Guide to Measuring Opportunity Cost, Morgan Stanley, Counterpoint Global Insights, 2023. https://www.morganstanley.com/im/publication/insights/articles/article_costofcapital.pdf

⁵² OECD: Financial markets and Climate Transition, Opportunities, Challenges and Policy Implications, 2021. <https://www.oecd.org/finance/Financial-Markets-and-Climate-Transition-Opportunities-Challenges-and-Policy-Implications.pdf>

⁵³ The CO2e (carbon dioxide equivalent) for any gas is derived by multiplying the weight of the gas by its associated GWP (Global Warming Power).

It is important to note that the climate impacts of sponsorships calculated with this method should be seen as quite conservative for a number of reasons:

- The 7.0 percent of return should be taken as a minimum and most corporate executives will likely be hoping for a better return on investments.
- Every sponsorship manager knows that the sum that is provided to the sponsee is only one part of the whole cost. One US study showed that sponsors spent an average \$2.20 extra for every \$1 paid in the sponsorship deal.⁵⁴ If it is not followed up by other marketing activities, promotions, staff activities etc, it will only be money down the drain.
- A sponsoring company will be eager to use what it has “bought”. The more the asset is used, the more benefit the company will draw; and the more investments will need to be returned.

⁵⁴ IEG: IEG’s guide to sponsorship, 2017.
<https://www.sponsorship.com/ieg/files/59/59ada496-cd2c-4ac2-9382-060d86fcbdc4.pdf>