

Dangerous Driving

Why sport should drop sponsorship from major polluters: the cases of Toyota and BMW





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Summary

Major fossil fuel polluters like the car industry are promoting themselves through sport like the tobacco industry once did.

- The heavily polluting car industry is spending an estimated minimum of \$4.5 billion on sports sponsorship as of February 2023 – meaning that expenditure has more than tripled against one of the few available estimates, made for 2018 (\$1.285 billion).
- More deaths are caused by pollution from fossil fuels than by tobacco. Tobacco ads are now widely prohibited, but adverts promoting high-carbon products and lifestyles are still allowed. Motor manufacturers sell heavily polluting products and lobby against reform, like tobacco companies did, using their influence to slow clean energy transitions, lock-in energy intensive private car use, and promote polluting behaviours and transport choices that harm the environment.
- Transport is one of the top four most polluting sectors globally and its emissions are rising. Within the transport sector, road transport is responsible for by far the largest share of emissions, 69 percent. Improvements in vehicle efficiency have been undermined by increasing volumes of travel and a shift to larger, more polluting vehicles such as SUVs.
- Air pollution is a particular threat to sportspeople, and is set to become the overall leading cause of premature death by 2050 according to the OECD, claiming 3.6 million lives a year. Other estimates already put the toll of premature deaths due to pollution from burning fossil fuels at over eight million per year.

Toyota and BMW are major sponsors of sports...

- Among the ten biggest car brands of 2021, Toyota has
 the "the most sponsorship deals by an automotive
 brand globally" including the largest number of active
 sports sponsorship deals, and the highest market
 share (10.5%). Including both past and present deals, at
 least 23 different sports were covered by the car
 maker's sponsorship deals.
- BMW ranks 4th with its 31 known active sport sponsorship deals (after Ford Motor Company with 43 and Hyundai Motor Group with 39 active deals as of December 2022). The BMW Group's sport sponsorship deals (past and present) comprise at least 21 different sports.

...and major polluters

- In a single year, 2021, Toyota sold 10,383,548 internal combustion engined (ICE) vehicles that rely on fossil fuels. Over their lifetime, these vehicles will emit over 700 million tonnes of CO₂, the equivalent of 190 coal-fired power stations running for an entire year.
- 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. Toyota's projected sales exceed the 1.5°C-compatible volume by 55 to 71 million ICE vehicles or, in other words, 144 to 184 percent.
- In 2021, BMW sold 2,193,200 ICE vehicles. Over their lifetime, these vehicles will emit around 150 million tonnes of CO₂, the equivalent of 40 coal-fired power stations running for an entire year.
- Combined, in 2021, BMW and Toyota sold 12,576,748 vehicles that rely on fossil fuels. Over their lifetimes, these will emit around 855 million tonnes of CO₂. This is equivalent to: 230 coal-fired power plants running for an entire year, or 2,149 gas-fired power plants running for an entire year.

Yet Toyota and BMW use sport to greenwash their reputations by paying to be 'sustainability' partners in sport...

- Both Toyota and BMW maintain sponsorships in which they pay to be key 'sustainability' partners whilst, represented through the EU carmakers' lobby, repeatedly diluting and preventing new emissions regulations.
- Toyota pays to be the International Olympic Committee's key partner concerning sustainable mobility solutions.
- In 2022, BMW succeeded Audi as a sponsor of the football club and became the club's 'Sustainable Mobility Partner'.

... but are part of industry wide efforts to resist and weaken environmental measures

- Toyota has been independently ranked as the most obstructive car company in the world when it came to lobbying against climate policy, and was ranked third most obstructive company overall, behind fossil fuel majors ExxonMobil and Chevron.
- BMW, famous for being embroiled in the 'diesel gate' affair concerning cheating figures on emissions, has also lobbied against environmental transport reform. Amongst other actions, its Group CEO, Oliver Zipse, pressured President Macron when France held the presidency of the EU Council to persuade him to delay the introduction of the fossil fuel car (ICE) phase-out from 2035 to 2040. In the UK, BMW Group lobbied the government to allow hybrid vehicle sales to continue up to 2035, while opposing the phase out of ICE motorbikes.
- Toyota and the BMW Group both refused to sign the pledge at the climate conference, COP26, to phase-out all ICE cars by 2040.



Sport relying on sponsorship from major polluters is nailing the lid on its own coffin

- Sports sponsorship leverages the fact that sport is something many people care deeply about and invest in emotionally. It seeks to take advantage of this emotional connection to achieve the business objectives of the sponsor: image, sales, and market share. But the impact of pollution and global heating on sport is causing cancelled and disrupted events, severe threats to the health and lives of athletes, and threatens declining participation rates.
- In the UK at least, codes for advertising state that, "Advertising must not encourage behaviour grossly prejudicial to the protection of the environment." (CAP Code 30:7) Promotional sponsorships with Toyota and BMW, given only the scale of their emissions contributing to global heating, can reasonably be considered to contravene this rule and such deals, certainly within the world of sport, should be ended.

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See: ASA, https://www.asa.org.uk/static/d819e399-3cf9-44ea-942b82d5ecd 6dff3/a79e0147-5417-4f7c-9fdce878078a7ffe/CAP-guidance-on-misleading-en vironmental-claims-and-social-responsibility.pdf

1. Introduction

Polishing polluters with sport

For too long, car manufacturers have used sport as a billboard to push their products. The logic behind this advertising strategy is clear to see: many of the characteristics, connotations, and aspirations that sport conjures up are the same ones that car manufacturers want consumers to associate with their vehicles. From endurance and pace, to community and collective joy, sport has got what car manufacturers want.

In 1988, former Big Tobacco marketeer Fritz Gahagan asked a pertinent question that cut to the core of how polluting and harmful industries promote themselves: "The problem is how do you sell death?" For an increasing number of companies that sell polluting products, the answer is: through sport and other areas of popular culture. This report makes the case of why sport must move beyond partnering with these companies – just as it did with tobacco products over the last half century.

Car manufacturers use sport as an advertising billboard because it works. Research shows that sports sponsorship is a powerful way to channel the intoxicating atmosphere of sport, with its intense emotions and shared jubilation. Over time, spectators and fans begin to associate these atmospheres and emotions positively with the sponsoring brand, often overlooking their polluting practices in the process.³ If sports sponsorship wasn't so effective, it would not be a \$65 billion global market that is expected to grow by 7.5 percent a year through to 2030.⁴

Action on Smoking and Health (ASH), February 2019, 'Tobacco Advertising and Promotion in the UK', https://ash.org.uk/resources/view/tobacco-advertising-and-promotion-in-the-uk

Hill et al., "The Roar of the Crowd: How interaction ritual chains create social atmospheres", (2021), Journal of Marketing, https://doi.org/10.1177/00222429211023355

Statista, Sports Sponsorship Revenue Worldwide 2021, https://www.statista.com/statistics/269784/revenue-from-sports-sponsorship-worldwide-bv-region

But there is a problem with the long-standing relationship between car brands and sport: some of the largest and most recognisable car brands in the world are driving us towards climate catastrophe, polluting our air, making the streets unsafe, and taking up an ever-increasing amount of public space. Although their glitzy advertisements and headline-grabbing targets will make you think they are going green, many car manufacturers are still deeply invested in keeping petrol and diesel vehicles on our roads for decades to come.

This report gathers evidence on the activities of Toyota and BMW both within sport and beyond it to shed light on how their production plans and advertising strategies align with reaching a low carbon future, as well as how their continued use of sport is damaging for people and the planet. We conclude that sport deserves far better and must act with urgency and transparency to ditch its high-carbon sponsors.

Driving emissions growth

Transport is one of the four largest polluting sectors contributing to global heating, making up 15 percent of global annual emissions.⁵ Within specific countries and regions, transport's share of emissions can be even greater. For instance, in Europe transport accounts for 25 percent of carbon emissions,⁶ while in the UK transport is responsible for 34 percent of emissions.⁷

Within the transport sector, road transport is responsible for the lion's share of emissions. Approximately 69 percent of transport emissions come from road travel, with around 45 percent coming from cars, motorcycles, buses, and taxis. However, the most alarming aspect of transport's emission footprint is that it is accelerating, with improvements in efficiency offset by increasing volumes of travel and a shift to larger, more polluting vehicles such as SUVs which have been

⁵ IPCC (2022) AR6 Working Group III https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_Chap ter02.pdf

Transport & Environment, April 2018, CO2 Emissions from cars: the facts https://www.transportenvironment.org/sites/te/files/publications/2018_04_CO2_ emissions_cars_The_facts_report_final_0_0.pdf

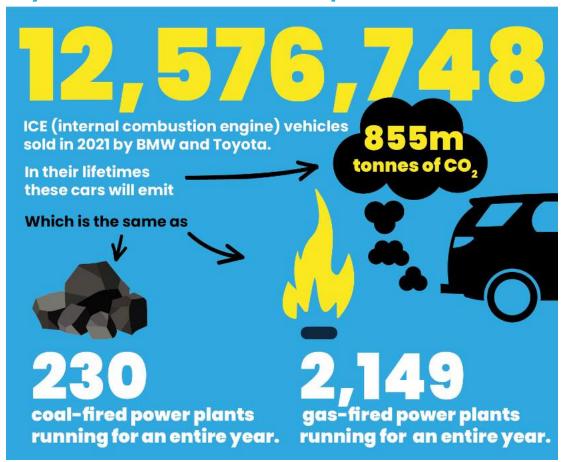
Department for Business, Energy & Industrial Strategy, March 26, 2020, 2019 UK greenhouse gas emissions, provisional figures https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/875485/2019_UK_greenhouse_gas_emissions_provisional_figures_statistical_release.pdf

⁸ IPCC (2022) AR6 Working Group III

⁹ See: https://ourworldindata.org/co2-emissions-from-transport

identified as a major factor in rising emissions. In 2022 global CO₂ emissions from SUVs rose by 70 million tonnes¹⁰ In January 2023 the share of SUVs in new car sales in Europe hit a record high, 51 percent, and the vast majority of those, around 90 percent, were fossil fuel powered.¹¹ Even if existing commitments to decarbonise transport are implemented in full, emissions from road transport are set to rise by 16 percent by 2050 compared to 2015 levels.¹²

Toyota and BMW's climate impact¹³



IEA, February 2023, As their sales continue to rise, SUVs' global CO2 emissions are nearing 1 billion tonnes, https://www.iea.org/commentaries/as-their-sales-continue-to-rise-suvs-global-co2-emissions-are-nearing-1-billion-tonnes

Financial Times, 19 March 2023, SUVs hit record share of new car sales in EU https://www.ft.com/content/151cb429-d024-4d5c-9edf-5b4a2b104a66

See: https://www.itf-oecd.org/worldwide-transport-activity-double-e-missions-rise-further

See methodology section in Annex 1 for detailed breakdown.

Health harms

'Particular features of the car create a vicious circle driving out healthier and sustainable alternatives' 14

Cars directly and indirectly affect our health and wellbeing. The direct impacts of car travel include air pollution, in particular particulate matter (PM2.5), which was linked to around 385,000 premature deaths worldwide in 2015. In the UK, more than one in 19 deaths are linked to air pollution. British people living in towns and cities are 25 times more likely to die from long-term exposure to poisonous air than a car crash. Air pollution and PM2.5 are not solely the reserve of petrol and diesel vehicles, electric vehicles (EVs) have been shown to emit these toxic particles too. In fact, over 2,000 times more particle pollution is produced through tyre wear than pollution from exhausts.

While smaller lightweight EVs emit between 10 and 13 percent less PM2.5 than petrol and diesel vehicles, heavier EVs such as battery electric SUVs emit up to 8 percent more PM2.5 than their fossil-fuelled counterparts due to tyre wear.¹⁹ Even short-term exposure to PM2.5 has been associated with premature death, increased hospital admissions for lung problems, acute bronchitis, and asthma attacks.²⁰ Long-term

Woodcock and Aldred, Op. cit.

ICCT, "A Global Snapshot of the Air Pollution-Related Health Impacts of Transportation Sector Emissions in 2010 and 2015", (2019), ICCT, https://theicct.org/publication/a-global-snapshot-of-the-air-pollution-related-health-impacts-of-transportation-sector-emissions-in-2010-and-2015/

Centre for Cities, "Cities Outlook 2020", (2020), https://www.centreforcities.org/publication/cities-outlook-2020/

¹⁷ Ibid

The Guardian, "Car tyres produce vastly more particle pollution than exhausts, tests show", (2022), https://www.theguardian.com/environment/2022/jun/03/car-tyres-produce-more-particle-pollution-than-exhausts-tests-show

OECD, "Non-exhaust Particulate Emissions from Road Transport : An Ignored Environmental Policy Challenge", (2020), https://doi.org/10.1787/4a4dc6ca-en

California Air Resources Board, "Inhalable Particulate Matter and Health (PM2.5 and PM10)", (n.d), https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health

exposure has been linked to strokes, cancer, respiratory infections²¹ and even dementia.²²

Cars drive social inequality

Whilst the car industry is often marketed as facilitating freedom, cost and worsening congestion levels means that remains elusive. Significant harms in terms of health impacts and worsening accessibility are distributed unequally across society:

Deprived areas are more likely to be heavily congested with traffic, resulting in high levels of air pollution, noise, severance and crashes... Cars [also] contribute to global inequalities, as low-income countries suffer most from climate change.²³

This unequal experience of the most severe harms of car use is highlighted in the Department of Transport's 2022 report, which identifies a steadily widening gap between deprived and less deprived areas, with more deprived areas reporting a higher proportion of road casualties, whilst the casualties reported in less deprived areas decrease.²⁴ The centrality of private car use also entrenches transport inequality, with the poorest and most marginalised communities often lacking access to good transport options. These conditions have a propensity to create a reinforcing cycle whereby limited

Wang et al., "The impact of long-term PM2.5 exposure on specific causes of death: exposure-response curves and effect modification among 53 million U.S. Medicare beneficiaries", (2020), Environmental Health, https://doi.org/10.1186/s12940-020-00575-0

Peters et al., "Air Pollution and Dementia: A Systematic Review", (2019), Journal of Alzheimer's Disease, 10.3233/JAD-180631.

Douglas et.al., Op. cit.

Department for Transport, 'Reported road casualties Great Britain: casualties and deprivation factsheet (England), 24th November 2022 [https://www.gov.uk/government/statistics/reported-road-casualties-great-britain-casualties-and-deprivation-factsheet-england/reported-road-casualties-great-britain-casualties-and-deprivation]

access to transport restricts access to employment and educational opportunities, healthcare and leisure activities.²⁵

EVs won't save us...

With transport activity set to double by 2050, it's clear that rapid and radical approaches to reducing the need and demand for road transport is required in addition to the roll-out of electric vehicles (EVs).

On their own, EVs will not be able to deliver the level of decarbonisation required in road transport and the wider economy, despite their impressive growth and the insistence of large car manufacturers that they are the solution. Even under the most optimistic roll-out forecasts, EVs will only deliver a 70 percent reduction in carbon emissions by 2050 when compared to a business-as-usual scenario.²⁶

These forecast emissions savings, however, are highly contingent on the decarbonisation of countries' energy mix, as the emissions saving potential of EVs is reduced if, for instance, coal power makes up a large proportion of electricity generation. The success of EVs also relies upon scaling up additional infrastructures that, in many countries, remains all but a pipe dream. The UK government forecasts that the country will need between 300,000 and 720,000 charge points by 2030 to accommodate EV. To reach even the lower anticipated number would require the instalment of over 100 per day – where current calculations have the number sitting at between 16 and 23.²⁷

More worrying, however, is that the emissions savings of some EVs may be overstated due to the increasing size of vehicles – a key trend in both European and American markets. Worse still, this trend is accelerating. In 2021, 45% of EVs sold in the UK and 57% of EVs sold in the US were Sports

Sovacool, B.K., Upham, P., Martiskainen, M. *et al.* Policy prescriptions to address energy and transport poverty in the United Kingdom. Nat Energy (2023). https://doi.org/10.1038/s41560-023-01196-w

ICCT, (2015) Global climate change mitigation potential from a transition to electric vehicles https://www.researchgate.net/publication/286623711 Global climate change mitigation-potential-from-a-transition-to-electric-vehicles

John Arlidge, 'Britain's EV revolution risks coming unplugged', The Sunday Times, 8th January 2023 https://www.thetimes.co.uk/article/britains-ev-revolution-risks-coming-unplugged-dblbpmgc9

Utility Vehicles (SUVs).²⁸ In 2022, for the first time ever, electric SUVs accounted for over half (51%) of global EV sales. Among the more than 400 EV models currently available on the market in 2022, 55% were electric SUVs; an increase of 15% from 2018.²⁹ A 2023 study concluded that electrified SUVs do not necessarily contribute to emissions reductions and therefore cannot contribute to strategies to mitigate climate change.³⁰ The authors state that reducing vehicle size, less driving and a reduction in total vehicle sales are policies "worth pursuing".³¹ Unfortunately, this level of policy ambition is woefully lacking from governments and car manufacturers.



Electrification of transport in general is urgent, but sticking with a car dominated system, even if electric, won't hit climate targets

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²⁸ IEA, 2022, 'Global EV Outlook 2022', https://www.iea.org/reports/global-ev-outlook-2022/trends-in-electric-light-duty-vehicles

²⁹ IEA, 2023, 'As their sales continue to rise, SUVs' global CO₂ emissions are nearing 1 billion tonnes', IEA Commentaries, https://www.iea.org/commentaries/as-their-sales-continue-to-rise-suvs-global-co2-emissions-are-nearing-1-billion-tonnes

Vilchez et al., (2023), "The new electric SUV market under battery supply constraints: Might they increase CO₂ emissions?", Journal of Cleaner Production, https://doi.org/10.1016/j.jclepro.2022.135294

³¹ Ibid.

2. Dangerous driving: the climate impacts of Toyota and BMW

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Toyota

Toyota's climate impact

In 2021, Toyota sold 10,383,548 ICE vehicles. Over their lifetime, these vehicles will emit over 700 million tonnes of CO₂, the equivalent of 190 coal-fired power stations running for an entire year.³² If Toyota's sales of ICE vehicles remain constant, this amount of emissions will be added to the atmosphere year-on-year.

By 2040, Toyota is planning to sell 110 million ICE vehicles.³³ 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.³⁴

The Japanese car manufacturer Toyota, headquartered in Toyota City in Aichi, Japan, is the largest car manufacturer in the world.³⁵ In 2021, Toyota sold around 10.5 million vehicles worldwide, a 10 percent rise on the year before and a return to pre-pandemic levels of sales.³⁶ Global car production of the Toyota group also rose by 9.4 percent in 2021, despite ongoing supply chain issues and shortages of key components, such as semiconductors.³⁷ Toyota owns several

³² See methodology section in Annex 1 for a detailed breakdown.

Greenpeace, November 2, 2022, The Internal Combustion Engine Bubble, https://www.greenpeace.de/publikationen/ICE-Bubble 2.pdf

See methodology section in Annex 1 for a detailed breakdown.

Misoyannis, A., January 31, 2023, Toyota remained world's biggest car maker in 2022, Drive, https://www.drive.com.au/news/toyota-remains-worlds-biggest-car-maker-in-2022/

³⁶ Statista, 2022, Toyota vehicle sales figures, https://www.statista.com/statistics/267274/worldwide-vehicle-sales-of-toyota -since-2007/

³⁷ Car Sales Statistics, 2022, 2021 (Full Year) Global: Toyota Worldwide Car Sales, Production, and Exports, https://www.best-selling-cars.com/brands/2021-full-year-global-toyota-world wide-car-sales-production-and-exports/.

other car brands including Daihatsu, Hino and Lexus, and has large stakes in several other car and motorbike companies, including Subaru Corporation (20 percent), Mazda (5.1 percent), Suzuki (4.9 percent), Isuzu (4.6 percent), and Yamaha Motor Corporation (3.8 percent).

Toyota (and Lexus) has a global reach. North America remains one of the largest markets for Toyota's cars, with nearly 2.7 million vehicles sold there in 2021.³⁹ In the same year, just over one million Toyota cars were sold in Europe and over three million were sold through Asia, with the lion's share of these sales made in China.⁴⁰ The growth in Toyota's sales in 2021 was not equal around the world. In some markets, such as Germany and Thailand, Toyota car sales fell compared to 2020.⁴¹ However, Toyota recorded a huge increase in sales in other emerging markets. For instance, Toyota increased its sales by nearly 65 percent in Pakistan, almost 59 percent in Indonesia, and over 30 percent in South Africa, respectively.⁴² These countries are already grappling with the devastating impacts of climate change, from devastating floods and rising sea-levels to noxious air.

Environmental commitments

Toyota has made multiple environmental claims and set targets, including achieving carbon-neutral factory operations by 2035⁴³ and reaching carbon neutrality globally by 2050 across both operations and its vehicle fleet as part of the Toyota Environmental Challenge 2050.⁴⁴ Toyota states that it is committed to achieving full carbon neutrality in Europe by 2040.⁴⁵ As part of commitment, Toyota is also aiming to "improve water usage, promoting end-of-life and

Toyota Global, n.d., Affiliates, https://www.toyota-global.com/company/history_of_toyota/75years/data/aut omotive_business/production/production/iapan/general_status/other.html

Car Sales Statistics, 2022, 2021 (Full Year) Global: Toyota Worldwide Car Sales, Production, and Exports, https://www.best-selling-cars.com/brands/2021-full-year-global-toyota-world wide-car-sales-production-and-exports/

⁴⁰ Ibid.

⁴¹ Ibid.

⁴² Ibid.

Reuters, June 11, 2021, Toyota aims to make its factories carbon neutral by 2035, says exec,
https://www.reuters.com/business/sustainable-business/toyota-will-aim-mak
e-its-factories-carbon-neutral-by-2035-says-exec-2021-06-11/

Toyota Europe, n.d., Sustainability at Toyota, https://www.toyota-europe.com/sustainability

⁴⁵ Ibid.

recycling technologies",⁴⁶ as well as the ambitious aim of "establishing a society in harmony with nature."⁴⁷

These targets, however, are recently announced initiatives in response to increasing public and investor pressure.⁴⁸ In 2018, Toyota was targeting a 40-70 percent reduction by 2050, before reaching "almost zero" by 2100.⁴⁹ According to an analysis from 2021, Toyota's carbon reduction plans are not compatible with the 1.5°C target of the Paris Agreement.⁵⁰ What's more, the details on how Toyota will actually achieve its self-imposed targets are worryingly scant.

The number of markets that Toyota operates in means that it has announced commitments and targets for specific regional markets. For instance, Toyota announced a commitment to reduce tailpipe emissions from its new vehicles by 100 percent from 2035 in Europe, meaning more than half of their vehicles in Europe should be zero-emission by 2030.⁵¹ Yet, these claims are misleading, as the EU's ban on new internal combustion engine vehicles (ICEs) is expected to come into force from 2035 and, as such, Toyota would be legally barred from selling anything but zero-emissions vehicles.⁵² The final approval on the EU phase-out date, however, is currently unclear due to resistance from governments in Germany, Italy, Poland and Bulgaria.⁵³

⁴⁶ Ibid.

⁴⁷ Ibid.

Financial Times, January 26, 2023, Toyota chief Akio Toyoda to step down as world's biggest carmaker wages EV battle, https://www.ft.com/content/11e4e53e-d4b0-4de3-b4eb-28c97b52b0a1

Toyota Global, 2018, Toyota Environmental Challenge 2050—Going Beyond Zero Environmental Impact and Achieving a Net Positive Impact, https://global.toyota/pages/global_toyota/sustainability/report/er/er18_07-13_en.pdf

Greenpeace, November, 2021, Auto Environmental Guide: 2021, https://www.greenpeace.org/static/planet4-eastasia-stateless/2021/11/47de8bb4-apea_auto_environmental_auide_2021.pdf

The Guardian, January 19, 2023, Spoof billboard ads take aim at BMW and Toyota over 'going green' claims, https://www.theguardian.com/environment/2023/jan/19/spoof-billboard-ads-take-aim-at-bmw-and-toyota-over-going-green-claims

European Parliament, February 13, 2023, EU ban on the sale of new petrol and diesel cars from 2035 explained, https://www.europarl.europa.eu/news/en/headlines/economy/20221019STO44572/eu-ban-on-sale-of-new-petrol-and-diesel-cars-from-2035-explained

Politico, March 2, 2023, EU's death sentence for cars hits a German roadblock, https://www.politico.eu/article/ursula-von-der-leyen-eu-germany-clean-car-plan-hostage/

Production plans

Despite the numerous pledges and targets to improve its environmental track record, Toyota remains woefully behind on scaling up its production and sales of EVs. By 2029, only 14 percent of Toyota's global production is forecast to be battery electric vehicles (BEVs).⁵⁴ This is unsurprising given Toyota was the last of the largest car manufacturers to announce a transition to BEVs.⁵⁵ There have also been issues with the EVs that Toyota has managed to bring to market. In June 2022, Toyota recalled 2,700 of its fully electric bZ4X SUV models – the company's first mass-produced EV – due to safety concerns over its wheels and airbags, less than two months after the launch.⁵⁶ Although production of the bZ4X has now recommenced, the launch was very much seen as an acid test for Toyota's broader EV strategy, which continues to face heavy criticism.⁵⁷

Toyota explained its slow uptake of EVs by suggesting that 'multiple technology solutions are necessary' to decarbonise road transport, but this reasoning does not hold up to scrutiny. The global EV market is booming, with one in seven cars sold worldwide being electric and sales forecast to double year on year. Despite this clear opportunity, and Toyota's substantial manufacturing heft within the automotive industry, the company announced that it will not be launching its "clean slate" EV range (with a dedicated EV structure, rather than an adjusted ICE frame) until 2027 at the earliest. By this point, EVs share of the global car market

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Go Auto News, June 5, 2022, Three Japanese majors ill-prepared for EV move, https://premium.goauto.com.au/three-japanese-majors-ill-prepared-for-ev-move/

Greenpeace, November 2, 2022, The Internal Combustion Engine Bubble, https://www.greenpeace.de/publikationen/ICE-Bubble 2.pdf

Automotive News Europe, October 6, 2022, Toyota to resume selling bZ4X electric SUV after safety recall, https://europe.autonews.com/automakers/toyota-resume-selling-bz4x-electric-suv

Financial Times, June 12, 2022, European pension funds attack Toyota for not going 'all in' on electric cars, https://www.ft.com/content/dfb0b5c9-4c74-4d67-995d-83556980b7c3

The Guardian, January 19, 2023, Spoof billboard ads take aim at BMW and Toyota over 'going green' claims, https://www.theguardian.com/environment/2023/jan/19/spoof-billboard-ads-take-aim-at-bmw-and-toyota-over-going-green-claims

BloombergNEF, September 23, 2022, Energy Transition Factbook 2022, https://assets.bbhub.io/professional/sites/24/BloombergNEF-CEM-2022-Factbook.pdf

Asahi Shimbun, January 25, 2023, Toyota to develop EV-only car platform so it can rival Tesla, https://www.asahi.com/ajw/articles/14823342

could be as high as 90 percent, according to Ark Invest,⁶¹ which means Toyota will struggle to gain any significant market share.⁶² Not only is Toyota's heel-dragging on EVs costing the climate, it may spell the end of their dominance within the global car market.

Instead of going "all in" on EVs, like other car manufacturers, Toyota has invested considerable resources developing a hydrogen fuel cell vehicle and scaling up its production, alongside lobbying efforts to carve out a continued role for hybrid vehicles. Hydrogen fuel cell vehicles are not a favoured technology to cut emissions from road transport, with many experts believing the technology is roughly ten years behind battery EVs.⁶³ There are also well-evidenced concerns over the cost of powering hydrogen fuel cell cars, the lack of fuelling infrastructure, the risk of explosions at fuelling stations, 64 and the fact that most of hydrogen's current feedstock comes from fossil fuels. In fact, at the end of 2021, almost 47 percent of global hydrogen production came from gas, 27 percent from coal, 22 percent from oil, and 4 percent from electrolysis. 65 According to the UN renewable energy body, IRENA, only 1 percent of global hydrogen production was produced using renewable energy.⁶⁶

Researchers exploring the alignment between the largest car manufacturers' projected ICE sales and the 1.5°C temperate threshold, found Toyota to be the worst performer.⁶⁷ They found that Toyota's projected sales exceed the 1.5°C-compatible volume by 55 to 71 million ICE vehicles or, in other words, 144 to 184 percent.⁶⁸ Much like the energy system, there is a huge risk of an 'ICE Bubble', where assets, such as factories, machinery and even the cars themselves become

ARK Invest, n.d., Electric Vehicles Archives, https://ark-invest.com/search-tags/electric-vehicles/

The Driven, January 30, 2023, Toyota faces disaster unless new CEO performs miracle pivot to electric vehicles, https://thedriven.io/2023/01/30/toyota-faces-disaster-unless-new-ceo-performs-miracle-pivot-to-electric-vehicles/

The Washington Post, March 2, 2020, The plug-in electric car is having its moment. But despite false starts, Toyota is still trying to make the fuel cell happen, https://www.washingtonpost.com/technology/2020/02/26/hydrogen-fuel-cell-cars/

⁶⁴ Ibid.

IRENA, n.d., Hydrogen, https://www.irena.org/Energy-Transition/Technology/Hydrogen

⁶⁶ Ibid

Greenpeace, November 2, 2022, The Internal Combustion Engine Bubble, https://www.areenpeace.de/publikationen/ICE-Bubble 2.pdf

⁶⁸ Ibid.

unusable due to more ambitious climate policy and ICE phase-outs around the world. This poses systemic risk to both large car manufacturers and financial markets. The largest twelve car manufacturers currently have over \$1.2 trillion in outstanding debt with a combined market capitalisation of \$859 billion.⁶⁹ As a result of this, the ICE Bubble could be as large as \$2 trillion - and perhaps more when taking into account manufacturing supplies and peripheral industries.70 Toyota, in particular, is now regarded as one of the most indebted companies in the world, with \$170 billion in current liabilities.71

Corporate controversies

Not only are Toyota dangerously behind the curve on electrifying their vehicle fleet, they have often been working behind the scenes in multiple countries to actively halt or delay more stringent measures to address air pollution and climate change. In the USA in 2019, Toyota publicly came out in support (alongside other car manufacturers) of the Trump administration's effort to remove federal government power in setting emissions limits, which would reduce the responsibility of car manufacturers to pursue better fuel efficiency.⁷² It is estimated that the rollback of legislation, and the decimation of the US's Environmental Protection Agency (EPA) will result in over one billion more tonnes of carbon dioxide emitted alongside higher prices at the pump for consumers.⁷³ Just two years later, in 2021, Toyota received the largest civil fine in US federal history - \$180 million - for knowingly breaching federal air emission requirements.74

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Ibid

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Toyota, 2022, Financial Summary FY2022, https://global.toyota/pages/global_toyota/ir/financial-results/2022_4g_summ ary_en.pdf

New York Times, October 29, 2019, Toyota's Support of Trump Emissions Rules Shocks Californians, https://www.nytimes.com/2019/10/29/business/toyota-california-emissions-ho nda-qm-chrysler.html

New York Times, March 31, 2020, U.S. to Announce Rollback of Auto Pollution Rules, a Key Effort to Fight Climate Change, https://www.nytimes.com/2020/03/30/climate/trump-fuel-economy.html

US Department of Justice, January 14, 2021, Toyota Motor Company to Pay \$180 Million in Settlement for Decade-Long Noncompliance with Clean Air Act Reporting Requirements, https://www.justice.gov/opa/pr/toyota-motor-company-pay-180-million-settl ement-decade-lona-noncompliance-clean-air-act

This noncompliance and public foot dragging was enough to drive a group of environmental NGOs, scientists and engineering experts in the USA to publish an open letter in which they note Toyota's efforts to "pressure members of Congress to reduce funding and oppose tax credits for Americans' access to zero-emission EVs" and how this is, "putting our nation's and the world's transportation and climate future at risk." Toyota has also made public threats to move its production out of specific countries in response to tighter environmental regulations, putting jobs at risk in the process. In 2022, Toyota threatened to pull its British manufacturing base out of the country in response to the government introducing a mandatory phase out date for ICE cars by 2030.76

Toyota was also engulfed by the Dieselgate scandal, where defective particulate filters and 'cheat devices' were installed on millions of diesel vehicles to bypass emissions standards, misleading both governments and consumers. The fallout of this scandal continues to unfurl, with Toyota Australia currently facing \$2bn in damages for the 260,000 Australian car owners who bought vehicles with defective diesel particulate filters.⁷⁷ The impacts of this scandal on local air quality, emissions and human health are still being felt.

Corporate lobbying & divergent strategies

Behind closed doors in the corridors of power, Toyota is known for using extensive and well-resourced lobbying campaigns to delay and derail tighter regulation over emissions standards and climate policy. In 2021, the lobbying watchdog Influence Map ranked Toyota as the most (1st) obstructive car company in the world when it came to lobbying against climate policy, citing the companies' continued opposition to ICE phase-out dates around the world. Influence Map ranked Toyota as the third (3rd) most obstructive company overall, behind fossil fuel giants

76 The Telegraph, July 30, 2022, Toyota warns Government it may stop manufacturing in UK if it bans hybrid cars, https://www.telegraph.co.uk/news/2022/07/30/toyota-warns-government-may-stop-manufacturing-uk-bans-hybrid/

22

Plug In America, n.d., Group Letter to Toyota, https://pluginamerica.org/group-letter-to-toyota/

⁷⁷ The Guardian, June 21, 2022, 'Environmental concerns remain as Toyota files appeal against class action ruling over diesel filters', https://www.theguardian.com/australia-news/2022/jun/21/environmental-concerns-remain-as-toyota-files-appeal-against-class-action-ruling-over-diesel-filters

InfluenceMap, n.d., Lobby Map Toyota Motor, https://lobbymap.org/company/Toyota-Motor/EN/projectlink/Toyota-Motor-In-Climate-Change

ExxonMobil and Chevron.⁷⁹ In 2022, it emerged that Toyota had restarted its donations to several US Republicans who challenged the results of Joe Biden's election to the White House in 2020, which culminated in the January 6 Capitol Hill Riots.⁸⁰

Examples of Toyota's opposition to ICE phase-out dates can be seen in its response to California's Advanced Clean Cars II regulation of 2022 that would require a 100 percent zero-emissions mandate by 2035, where Toyota pushed for several compromises to reduce the regulations reach and stringency.⁸¹ In the same year, former Toyota President, Akio Toyoda, stated that it would be "difficult" to achieve the 2035 target in California and the federal target of 50 percent zero-emissions vehicles by the same year.⁸²

Similar patterns of corporate behaviour and triangulation are found elsewhere. In 2021, it was reported that 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.83 In New Zealand, Toyota's response to a government consultation and an op-ed penned by the chief executive of Toyota's New Zealand operations both made the case against the proposed 2035 phase out of petrol and diesel cars. Likewise, a FOI request in Britain found a similar sentiment reflected in Toyota's response to the UK government consultation on the 2030 phase-out date for ICE cars, where the company called for a weakening of the policy to allow the continued sale of hybrid vehicles up to 2035.84 On the world stage, Toyota refused to sign the global pledge made at COP27 to phase-out ICE cars in leading markets by 2035 and worldwide by 2040, alongside Volkswagen, Hyundai,

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InfluenceMap, November 4, 2021, The World's Most Obstructive Companies on Climate Policy, https://influencemap.org/pressrelease/The-World-s-Most-Obstructive-Companies-on-Climate-Policy-51b2f34e71d4cf9b1eef19bb3d8ef484

The Independent, April 27, 2022, Toyota attacked by anti-Trump group after resuming donations to Republicans who contested 2020 election, https://www.independent.co.uk/news/world/americas/us-politics/toyota-lincoln-project-ad-campaign-b2066649.html

InfluenceMap, n.d., Lobby Map Toyota Motor, https://lobbymap.org/company/Toyota-Motor/EN/projectlink/Toyota-Motor-In-Climate-Change

Motor Authority, October 3, 2022, Toyota CEO: California and US EV targets "difficult to really achieve", https://www.motorauthority.com/news/1137347_toyota-ceo-california-and-us-ev-targets-difficult-to-really-achieve

⁸³ InfluenceMap, n.d., Lobby Map Toyota Motor, https://lobbymap.org/company/Toyota-Motor/EN/projectlink/Toyota-Motor-In-Climate-Change

⁸⁴ Ibid.

and Stellantis.⁸⁵ Toyota justified its move not to sign the pledge by stating that "in many areas of the world such as Asia, Africa, Middle East…an environment suitable for promoting full zero emission transport has not yet been established."⁸⁶

Toyota also makes extensive use of industry associations and trade bodies around the world to pressure policymakers. Toyota executives hold senior positions within the Japan Automobile Manufacturers Association (JAMA), the Japanese business federation Keidanren, and the European Automobile Manufacturers Association (ACEA).87 In addition to this, Toyota membership in the National Association Manufacturers (NAM) and the Alliance of Automotive Innovation in the USA. the Society of Motor Manufacturers and Trades (SMMT) in Britain, the Society of Indian Automobile Manufacturers (SIAM) in India.88 These trade associations have made a number of policy interventions that reflect Toyota's stance on decarbonising the vehicle fleet. For instance, in 2022 the ACEA president publicly urged policymakers to delay the introduction of the EU's zero-emission target for cars by 2035 and, instead, aim for 2040 at the earliest.89 SMMT responded to a UK government consultation advocating that hybrid vehicles should still be sold in Britain until 2035 as part of the ICE phase-out.90

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Euronews, November 10, 2021, COP26: World's biggest carmakers fail to sign zero emissions pledge at UN climate talks, https://www.euronews.com/next/2021/11/10/cop26-world-s-biggest-carmakers -fail-to-sign-zero-emissions-pledge-at-un-climate-talks

Reuters, November 11, 2021, *Toyota says large parts of world not ready for zero-emission cars*,

https://www.reuters.com/business/cop/toyota-says-large-parts-world-not-ready-zero-emission-cars-2021-11-11/

⁸⁷ InfluenceMap, January 2023, Toyota Motor Corporation Scorecard, https://ca100.influencemap.org/site//data/000/037/Toyota-Review-Scorecard-Jan23.pdf

⁸⁸ Ibid

Politico, March 18, 2022, BMW CEO wants a delay in EU combustion engine phaseout plans, https://www.politico.eu/article/bmw-ceo-wants-a-delay-in-eu-combustion-engine-phaseout-plans/

⁹⁰ InfluenceMap, January 2023, Toyota Motor Corporation Scorecard, https://ca100.influencemap.org/site//data/000/037/Toyota-Review-Scorecard-Jan23.pdf

BMW's climate impact

In 2021, BMW sold 2,193,200 ICE vehicles. Over their lifetime, these vehicles will emit around 150 million tonnes of CO₂, the equivalent of 40 coal-fired power stations running for an entire year. If BMW's sales of ICE vehicles remain constant, this amount of emissions will be added to the atmosphere year-on-year.

Bayerische Motoren Werke AG, known more commonly as BMW, is a German multinational car manufacturer headquartered in Munich that was founded in 1916 to manufacture aircraft engines. P2 In 1923, BMW manufactured its first motorcycle, the R32, and in 1951 the company completed work on its first car, the BMW 501. Since then, the company has grown to be one of the largest and most successful car companies in the world, employing nearly 120,000 people with 31 production facilities spread across 15 countries. In 2021, BMW reported profits of over €111 billion and sold nearly 2.4 million passenger vehicles and more than 202,000 motorcycles worldwide.

The BMW Group owns other notable car brands beyond BMW, including Mini Cooper and Rolls Royce. 96 In 2021, just over 300,000 Minis were sold worldwide with sales yet to return to pre-pandemic levels. 97 Rolls Royce, the luxury car manufacturer, sells considerably less cars than the BMW and Mini models. In 2022, around 6,021 Rolls Royce cars were sold to customers in over 50 countries, an 8 percent rise on the

⁹¹ See methodology section in Annex 1 for a detailed breakdown.

BMW Group, n.d., Company, https://www.bmwaroup.com/en/company.html

⁹³ Ibid

⁹⁴ Ibid

BMW Group, January 10, 2023, BMW Group stays on track for success in 2022: Maintains No. 1 position in global premium segment, doubles electric sales, https://www.press.bmwgroup.com/global/article/detail/T0407340EN/bmw-group-stays-on-track-for-success-in-2022:-maintains-no-1-position-in-global-premium-seament-doubles-electric-sales

⁹⁶ BMW Group, n.d., International Success, https://www.bmw.in/en/topics/Fascination-BMW/the-corporation-original/thebmw-group.html

⁹⁷ Statista, n.d., Worldwide Sales Volumes, https://www.statista.com/statistics/267245/worldwide-sales-volume-of-mini-a utomobiles-since-2006

year before and the first time the company has ever exceeded 6,000 annual sales. That said, Rolls Royce cars could be said to exclusively to service the polluter elite, with fuel efficiency averaging between 17 and 18 miles per gallon, and emissions per vehicle typically being around 350g/kmCO₂ or above – more than triple the average carbon intensity of a modern ICE vehicle. Given that the EU carbon intensity target for a car is a limit of 95g/km now, and falls to zero by 2035, Rolls Royce represents a small number of cars with a big problem.

Although BMW Group has a global reach, and has a presence in most economies, there are a number of key sales markets for their cars. In 2021, China made up almost 34 percent of BMW Group sales (including Mini and Rolls Royce models), with the USA making up nearly 15 percent, Germany around 11 percent, the UK 6.5 percent, and South Korea just over 3 percent.¹⁰¹

Environmental commitments

BMW Group has made multiple sustainability pledges in recent years. At the time of writing, the BMW Group aims to reduce carbon emissions by more than 40 percent by 2030 over the full lifecycle of its cars, addressing each stage in the supply chain, from production to the end of use. The BMW Group aims to be carbon-neutral "no later than 2050". Specifically relating to the production process of BMW vehicles, the company has targeted an 80 percent reduction of carbon emissions by 2030 that will be achieved by increasing the amount of materials re-used in the manufacturing process from 30 percent today to 50 percent

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PES, January 9, 2023, Rolls-Royce achieves historic sales record in 2022, https://www.pesmedia.com/rolls-royce-posts-historic-sales-record-in-2022

Fleet News, n.d., Car CO₂ and fuel economy figures for Rolls Royce vehicles, https://www.fleetnews.co.uk/cars/Car-CO2-and-fuel-economy-mpg-figures? manufacturer=rolls-royce

European Council, n.d., Fit for 55: why the EU is toughening CO2 emission standards for cars and vans, https://www.consilium.europa.eu/en/infographics/fit-for-55-emissions-cars-a-nd-vans/

Statista, 2021, Breakdown of BMW Group's worldwide automobile sales in FY 2021, by region, https://www.statista.com/statistics/267252/key-automobile-markets-of-bmw-group/

BMW Group, n.d., Sustainability: Our Goals, https://www.bmwgroup.com/en/sustainability/our-goals.html

¹⁰³ Ibid.

by 2030.¹⁰⁴ BMW Group claims that its targets for decarbonising its production process is a "more ambitious path than the 1.5 degree goal."¹⁰⁵

BMW Group has made several other environmental commitments and public interventions. In 2020, BMW Group became the largest global car manufacturer to join the Science-Based Targets initiative (SBTi), which aims to provide a transparent and scientifically robust pathway to decarbonisation for businesses. They also committed to procuring 100 percent of its electricity from renewable sources of generation by 2050 through the RE100 initiative spearheaded by Climate Group. BMW Group has also joined the United Nations Framework Convention on Climate Change's (UNFCCC) Race to Zero 'Business Ambition for 1.5°C' framework, alongside Nissan, Volvo, Ford, and others international car manufacturers. 108

Production plans

BMW Group sold a total of 2,521,514 vehicles in 2021 across BMW, Mini, and Rolls-Royce. This sales figure was an increase on the year before and marks a return to pre-pandemic levels of sales, which reached 2,537,504 in 2019. In addition to its cars, BMW also sold 194,261 motorbikes in 2021, nearly 20,000 more than the pre-COVID peak in 2019. Of the 2,521,514 vehicles sold by BMW Group in 2021, 13 percent were electrified. In 2022, BMW Group's EV sales increased by 107.7 percent on the previous year,

Business Plus, September 8, 2022, The BMW Group Sets New, Ambitious CO2 Emissions Goals For 2030, https://businessplus.ie/promoted/bmw-co2-emissions/

BMW Group, n.d., Sustainability: Our Focus, https://www.bmwgroup.com/en/sustainability/our-focus/co2-reduction.html

ESG News, July 27, 2022, BMW announces commitment to sustainability goals, climate neutrality by 2050, https://esgnews.com/bmw-announces-commitment-to-sustainability-goals-climate-neutrality-by-2050/

Edie, December 7, 2015, BMW and Coca-Cola join latest wave of RE100 pledges, https://www.edie.net/bmw-and-coca-cola-join-latest-wave-of-re100-pledges

UNFCCC, n.d., Race to Net Zero, https://unfccc.int/climate-action/race-to-zero/who-s-in-race-to-zero

BMW Group, n.d., Investor Relations, https://www.bmwaroup.com/en/investor-relations/facts-and-figures.html

¹¹⁰ Ibid.

III Ibid

¹¹² Ibid

reaching 215,755 EVs sold, despite a fall in overall vehicle sales.¹¹³

By 2025, BMW Group is aiming to have at least two million EVs on the road.¹¹⁴ Just five years later, in 2030, BMW Group is planning on EVs making up half of all its global sales, with ICE vehicles making up the other half. However, the company's hesitancy is clear. During its annual conference in 2021, the car manufacturer said it had no plans to stop developing ICE vehicles and declined to set a firm expiration date for its ICE range.¹¹⁵ Tellingly, most of BMW Group's EV range are electrified versions of existing ICE vehicles, meaning that the manufacturer is yet to take advantage of dedicated "clean slate" EV architectures. 116 While a variety of new EV models are set to be launched by BMW Group from 2025,117 the company's reluctance to set a firm date for phasing-out its ICE production and sales – like other car manufacturers have done – is a reflection of them still seeing a profitable future in ICE vehicles for decades to come.

In an interesting turn, BMW has recently launched a hydrogen fuel cell powered SUV, the BMW iX5.¹¹⁸ The fuel cell to power this SUV has been developed in partnership with Toyota, with BMW likely to tour the vehicles around next year to "publicise the zero-emissions powertrain solution".¹¹⁹ As outlined in the section above on Toyota, hydrogen is plagued with controversies and is far less developed than battery technology. Tesla CEO, Elon Musk, described the technology as "mind-bogglingly stupid" and labelled them "fool cells".¹²⁰

Business Plus, September 8, 2022, The BMW Group Sets New, Ambitious CO2 Emissions Goals For 2030, https://businessplus.ie/promoted/bmw-co2-emissions/

AutoCar, January 10, 2023, BMW Group doubles EV sales amid overall decline, https://www.autocar.co.uk/car-news/business-car-sales/bmw-group-doubles-ev-sales-amid-overall-decline

Teslerati, October 10, 2022, It's the beginning of the end for BMW ICE sales, https://www.teslarati.com/end-bmw-ice-q3-sales-i4-ix/

Green Car Reports, March 22, 2021, BMW Plans for half of global sales to be EVs by 2030, https://www.greencarreports.com/news/1131630_bmw-plans-for-half-of-global_sales-to-be-evs-by-2030-but-no-expiration-date-for-ice

¹¹⁶ Ibid

AutoExpress, December 2, 2022, BMW iX5 Hydrogen enters small series production, https://www.autoexpress.co.uk/bmw/359305/new-2023-bmw-ix5-hydrogen-enters-small-series-production

¹¹⁹ Ibid.

S&P Global, November 25, 2019, Why 'mind-bogglingly stupid' hydrogen-powered cars are not going away, https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/why-mind-bogglingly-stupid-hydrogen-powered-cars-are-not-going-away-55328443

Other, more objective analysts, have described them as a distraction.¹²¹

Corporate controversies

Although BMW Group have set apparently ambitious, but ambivalent, targets to scale up their EV production and sales, their corporate history has been dogged by controversies that should be explored in light of their commitment to ending the sale of ICE cars. BMW Group was engulfed by the Dieselgate scandal of 2015, when a number of car manufacturers were alleged to have intentionally bypassed emissions testing through the use of illegal software. In the UK, BMW and Mini fitted illegal 'emissions defeat devices' in hundreds of thousands of diesel vehicles, which allowed the cars to gain regulatory approval by reducing emissions under test conditions. However, once the vehicles passed, the cars produced much higher emissions during everyday usage. In some cases, the cars in question emitted 40-times more than the legal levels of nitrogen oxide (NO_x) outside of test conditions.¹²² For a number of years, BMW Group insisted that it installed the illegal software on over 11,000 vehicles by mistake.¹²³

As the scandal began to unfurl, it was found that the car manufacturers involved had illegally colluded to limit the effectiveness of their emissions technology. Page 2019, four years after the scandal first hit, more than three quarters of the 43 million diesel vehicles that were intentionally tampered with are still on European roads. This resulted in the European Commission fining Volkswagen and BMW a combined €875 million in 2021 on the charge of collusion. There was also a human and environmental cost of the emissions scandal. One peer-reviewed US study concluded that the excess pollution produced by the cars equipped with

NPR, September 18, 2015, Volkswagen Used 'Defeat Device' To Skirt Emissions Rules, EPA Says, https://www.npr.org/sections/thetwo-way/2015/09/18/441467960/volkswagen-used-defeat-device-to-skirt-emissions-rules-epa-says

¹²¹ *Ibid*.

Bridge Chronicle, May 18, 2018, *BMW admits mistake in diesel emissions scandal*, https://www.thebridgechronicle.com/business/bmw-admits-mistake-diesel-emissions-scandal-18219

New York Times, July 8, 2021, Volkswagen and BMW are fined nearly \$1 billion for colluding on emissions technology, https://www.nytimes.com/2021/07/08/business/volkswagen-bmw-daimler-emi ssions-scandal.html

The Guardian, May 28, 2019, 33m polluting cars still on EU roads after Dieselgate scandal, https://www.theguardian.com/environment/2019/may/28/dieselgate-33m-polluting-cars-still-on-eu-roads

emissions defeat devices would have led to 59 premature deaths in the USA.¹²⁶ Other studies explored the impact of excess NOx pollution, a dominant driver of ground-level ozone, which can cause asthma, bronchitis, emphysema, and other respiratory harms.¹²⁷ It's for these reasons that Axel Friedrich, former official at German environmental regulator Umweltbundesamt and the founder of the ICCT, remarked that "it's not just fraud – it's physical assault."¹²⁸

Corporate lobbying & divergent strategies

The public statements, annual reports and advertisements of BMW Group paint a picture of a business that is embracing the transition to a zero emission society and sees the opportunities the energy transition creates. Yet, its corporate lobbying strategies paint a very different image. The current CEO of BMW Group, Oliver Zipse, wrote a letter to President Macron when France held the presidency of the EU Council in an attempt to persuade him to delay the introduction of the ICE phase-out from 2035 to 2040. In Zipse has also publicly opposed the introduction of the ICE phase-out date in Europe in his role as the ACEA president, stating that a 2035 target would be a very dangerous thing. This matches up with Zipse's response to the EU's landmark 'Fit for 55' policy programme in 2021, where the BMW chief argued that "the proposed target is simply not viable".

In New Zealand, BMW Group used the consultation process to push back against the proposed Clean Car Bill, which sought to tighten carbon emissions targets for cars, calling for the 2025 and 2027 targets to be pushed back. In the UK, BMW Group lobbied the government to allow hybrid vehicle sales to continue up to 2035, while opposing the phase out of ICE

Barrett et al., 2015, Impact of the Volkswagen emissions control defeat device on US public health, Environmental Research Letters, 10.1088/1748-9326/10/11/114005.

¹²⁷ Zhang *et al.*, 2019, Ozone Pollution: A Major Health Hazard Worldwide, *Frontiers in Immunology*, https://doi.org/10.3389/fimmu.2019.02518.

New York Times, June 9, 2016, Volkswagen Not Alone in Flouting Pollution Limits, https://www.nytimes.com/2016/06/10/business/international/volkswagen-not-alone-in-flouting-pollution-limits.html?module=Promotron®ion=Body&action=click&pgtype=article

InfluenceMap, n.d., BMW Group Lobby Map, https://lobbymap.org/company/BMW-Group

Politico, March 18, 2022, BMW CEO wants a delay in EU combustion engine phaseout plans, https://www.politico.eu/article/bmw-ceo-wants-a-delay-in-eu-combustion-engine-phaseout-plans/

Automotive News Europe, July 14, 2021, Combustion engine ban proposal criticized by auto lobby groups,
https://europe.autonews.com/environmentemissions/combustion-engine-ban-proposal-criticized-auto-lobby-groups

motorbikes and the UK's zero-emissions mandate.¹³² At a global level, BMW Group joined Toyota in not signing the pledge at COP26 to phase-out all ICE cars by 2040, citing "considerable uncertainty" about how such a target would be achieved. 133 In the same month, BMW's head of sustainability, Thomas Becker, justified the company's reluctance to fully phase-out the production of ICE cars on a lack of "framework conditions" in less developed nations to support charging infrastructure.¹³⁴ These comments fit with others made by the leadership team of BMW Group and other car manufacturers, such as Toyota, that the transition must "technology-neutral", 135 thereby leaving the regulatory window open to hybrid, hydrogen, and synthetic fuel vehicles.

In Germany, where BMW Group is headquartered, the company and its German business owners are some of the largest donors to German political parties. Since 2000, BMW and the Quandt and Klatten families have donated a total of €10.141,071 to the Christian Democratic Union of Germany (CDU) and its Bavarian sister party the Christian Social Union (CSU), the Free Democratic Party (FDP), the Social Democratic Party (SPD), and the Greens, with the majority of donations flowing to the conservative CDU and CSU.¹³⁶ BMW also provides a fleet of vehicles for all of the main political parties in Germany free of charge, which have been listed as party donations.¹³⁷ BMW Group has been reported to lobby both the Federal and state governments in Germany against emissions standards and the proposed phase-out of ICE vehicles.¹³⁸ Germany's current resistance to the EU-wide ICE phase-out by 2035 could be a reflection of lobbying from the domestic automotive industry.

InfluenceMap, n.d., BMW Group Lobby Map, https://lobbymap.org/company/BMW-Group

Edie, November 15, 2021, BMW, Toyota and other major carmakers accused of lobbying against stronger climate policies, https://www.edie.net/bmw-toyota-and-other-major-carmakers-accused-of-lobbying-against-stronger-climate-policies/

Dezeen, November 12, 2021, BMW won't ditch combustion engine until "poorer countries do their job" on EV infrastructure, https://www.dezeen.com/2021/11/12/bmw-electric-vehicles-cop26/

ACEA, June 22, 2021, Car CO2 review: Europe should not be driven by culture of restrictions,

https://www.acea.auto/press-release/car-co2-review-europe-should-not-be-driven-by-culture-of-restrictions/

Lobbypedia, n.d., BMW [German], https://lobbypedia.de/wiki/BMW

¹³⁷ Ibid

¹³⁸ *Ibid.*



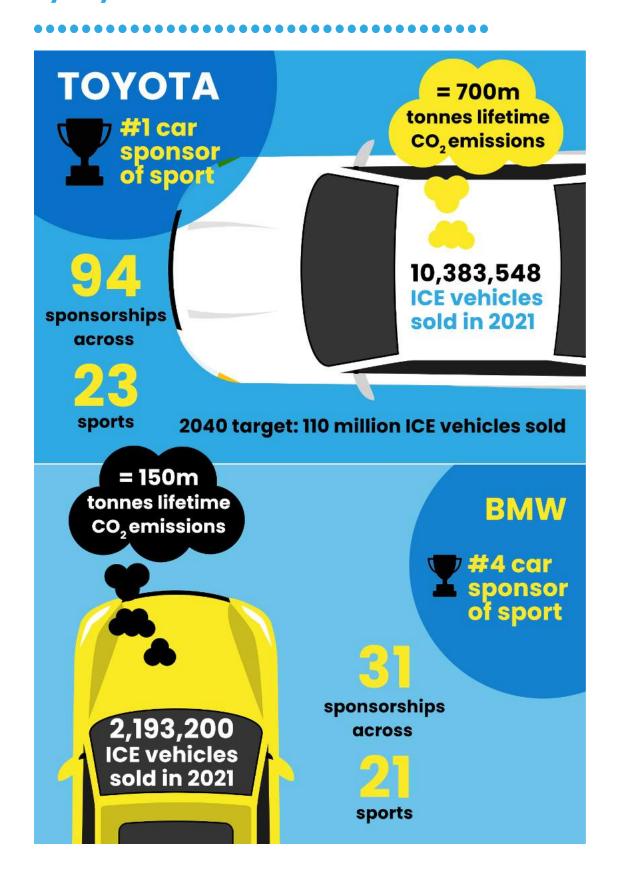
BMW Group is a member of a variety of industry associations and trade bodies that have made regressive political interventions around environmental and climate legislation. For instance, BMW Group is a member of the German Association of the Automotive Industry (VDA) which, in 2021, penned a letter to vice-president of the European Parliament, Frans Timmermans, opposing the ICE phase-out date of 2035 and a CO₂ reduction of 60 percent by 2030. What's more, BMW is also a member of Business Europe who lobbied the European Parliament to halt the phasing out of free allowances under the EU's Emissions Trading Scheme (ETS) before 2030.¹⁴⁰ BMW Group also retains membership of the Alliance for Automotive Innovation in the USA and the Society of Indian Automobile Manufacturers (SIAM) in India, both of which have been known to oppose climate policy in their respective jurisdictions.¹⁴¹

InfluenceMap, May, 2022, BMW Group Scorecard, https://ca100.influencemap.org/site//data/000/032/BMW-Review-Scorecard-May22.pdf

¹⁴⁰ *Ibid*.

InfluenceMap, n.d., BMW Group Lobby Map, https://lobbymap.org/company/BMW-Group

3. Sportswash: sponsorship of sport by Toyota & BMW



Introduction

Despite sports sponsorship being a huge global industry, with companies seeking to boost their corporate image, raise brand awareness, as well as their revenue and market share, inding detailed and accurate information on sponsorship deals is extremely difficult. The sports sector, with its guaranteed global exposure, provides a unique platform and is the main beneficiary of sponsorship spending in the majority of countries exceeding other properties such as entertainment, causes, arts, festivals, fairs and annual events, as well as associations and membership organisations by far.¹⁴³

One estimate suggests that, "sport sponsorship generates an average return on investment (ROI) of \$6.20 for every dollar spent" - this is the increased income from higher sales that result from advertising spend. If true, this ratio of 6.2:1 would put returns in sport sponsorship at the very high end of the estimated range for advertising ROI. International sports sponsorship is a \$65 billion global market that is expected to grow by 7.5 percent a year through to 2030. More than 70% of spending goes on purchasing the right to be associated with a team or event. Sports sponsorship leverages the fact that sport is something many people care deeply about and invest in emotionally. It seeks to take advantage of this

Thomas, Kucza & Schuppisser, 2022, Can Sports Sponsorship Affect Consumers' Motivation for Sports Consumption? Journal of Promotion Management; Simms & Tricarico, 2021, Sweat Not Oil, https://www.rapidtransition.org/resources/sweat-not-oil-why-sports-should-dr

https://www.rapidtransition.org/resources/sweat-not-oil-why-sports-should-drop-advertising-and-sponsorship-from-high-carbon-polluters/

Chadwick, Widdop & Burton, 2022, Soft Power Sports Sponsorship – A Social Network Analysis of a New Sponsorship Form. Journal of Political Marketing 21 (2): 196–217.; Statista, January 6, 2023, Global sponsorship spending from 2007 to 2018

https://www.statista.com/statistics/196864/global-sponsorship-spending-sine

https://www.statista.com/statistics/196864/global-sponsorship-spending-sinc e-2007/; IEG, 2015, Sponsorship Spending Report https://www.sponsorship.com/ieg/files/4e/4e525456-b2b1-4049-bd51-03d9c35ac507.pdf https://doi.org/10.1080/15377857.2020.1723781

Venturoli, n.d., The effectiveness of sport sponsorship: here's marketing best kept secret https://rtrsports.com/en/blog/effectiveness-of-sport-sponsorship/

Statista, January 5, 2023, Sports Sponsorship Revenue Worldwide, 2021, https://www.statista.com/statistics/269784/revenue-from-sports-sponsorship-worldwide-by-region

Chadwick, Widdop & Burton, 2022, Soft Power Sports Sponsorship – A Social Network Analysis of a New Sponsorship Form. Journal of Political Marketing 21 (2): 196–217. https://doi.org/10.1080/15377857.2020.1723781.

emotional connection to achieve the business objectives of the sponsor: image, sales, and market share.¹⁴⁷

A major, high carbon industry investing heavily in sports sponsorship is car manufacturing, with an estimated minimum spending of \$4.5 billion on sports as of February 2023¹⁴⁸ – this is the value of known, currently active sponsorship deals – meaning that expenditure could have more than tripled against one of the few, available estimates, made for 2018 (\$1.285 billion).¹⁴⁹ With previous FIFA World Cups attracting up to 3.5 billion people and the Olympics an audience of 3.05 billion,¹⁵⁰ it is not surprising that half of car

148 AFL, March 14, 2019, AFL and Toyota agree to long-term, record-breaking deal https://www.afl.com.au/news/130470/afl-and-toyota-agree-to-long-term-record-breaking-deal; Barnwell, January 14, 2023, Kia adds NRL in new sponsorship deals

https://premium.goauto.com.au/kia-adds-nrl-in-new-sponsorship-deals/; Bavarian Football Works, January 14, 2020, Bayern Munich sign mega-deal with Audi worth €50m a season

https://www.bavarianfootballworks.com/2020/1/14/21065124/bayern-munich-mega-deal-audi-50m-season-bmw-finances-barcelona-real-madrid-manchester-united; Bose, November 15, 2022, Los Blancos go green!

https://www.energylivenews.com/2022/11/15/los-blancos-go-green/; Buckingham-Jones, January 10, 2023, Kia signs record \$107m deal with Tennis Australia

https://www.afr.com/companies/media-and-marketing/kia-signs-record-107-million-deal-with-tennis-australia-20230110-p5cbka; Chaudhuri, May 2, 2022, Roland-Garros nets massive Renault deal

https://sportskhabri.com/roland-garros-nets-massive-renault-deal/; CNBC, March 13, 2015, Toyota signs on as global Olympic sponsor in long-term deal https://www.cnbc.com/2015/03/13/toyota-signs-on-as-global-olympic-sponsor-in-long-term-deal.html; Dudley, December 1, 2017, French Football Federation extends with Volkswagen

https://www.sportspromedia.com/news/french-football-federation-extends-with-volkswagen/?zephr_sso_ott=WyRVyW; Global Data, January 18, 2023, Business of National Basketball Association (NBA) 2033-23 - Property Profile, Sponsorship and Media Landscape

https://www.globaldata.com/store/report/nba-business-analysis/; Medianews4u, October 14, 2015, Nissan signs eight year cricket sponsorship deal with ICC

https://www.medianews4u.com/nissan-signs-eight-year-cricket-sponsorship-deal-with-icc/ (10.02.2023); Reuters, July 14, 2017, VW replaces Daimler as German national football team sponsor

https://www.reuters.com/article/uk-volkswagen-soccer-idUKKBN19Z159; SportBusiness, Toyota and BMW sponsorships. Accessed: April 2023 https://www.sportbusiness.com/search/toyota+bmw+sponsorship/; Tudose, July 24, 2019, Cupra In Talks To Replace Audi As FC Barcelona Automotive Sponsor

https://www.carscoops.com/2019/07/cupra-in-talks-to-replace-audi-as-fc-barcelona-automotive-sponsor/

- CEO Today, February 28, 2018, Why Do Audi, BMW & VW Sponsor Sports? https://www.ceotodaymagazine.com/2018/02/why-do-audi-bmw-vw-sponsor-sports/
- Richter, November 17, 2022 FIFA World Cup: The Biggest Stage of All?

 https://www.statista.com/chart/28766/global-reach-and-tv-viewership-of-the-fifa-world-cup/

Brand Essence Research, 2021, Reports: Sports Sponsorship Market https://brandessenceresearch.com/technology-and-media/sports-sponsorship-market-size

industry sponsorship is spent on football, the Olympics and qolf.¹⁵¹

Car manufacturers, however, loom large among the problematic sponsors of sport today, just like tobacco companies once were. They sell heavily polluting and harmful products, lobby governments to lock-in energy intensive private car use and slow clean energy transitions, 152 and promote polluting behaviours and transport choices that harm the health of people and planet. Studies have demonstrated "a direct link between car and airline advertisements and increased GHG emissions". 153 In short, they make an odd partner for sports whose athletes need clean air to breathe and whose events depend upon a stable climate.

Mirroring the way fossil fuel companies' adverts heavily focus on their relatively small scale renewable energy projects, car companies have disproportionately featured electric vehicles in advertising and sponsorship arrangements. This approach seeks to bolster their environmental credentials, and distracts from the huge volumes of fossil-fuelled cars they continue to produce and their work behind the scenes lobbying governments to halt or delay climate policy and, indeed, the introduction of electric vehicles (see above with regard to Toyota and BMW). 154

Polluting industries and companies, like Toyota and BMW, use the platform of sport because it works. Research finds "that advertising indirectly causes climate and ecological degradation through its encouragement of materialistic values and goals" 155 making it less likely for people to commit

CEO Today, February 28, 2018 Why Do Audi, BMW & VW Sponsor Sports? https://www.ceotodaymagazine.com/2018/02/whv-do-audi-bmw-vw-sponsor

In 2022, for example, Toyota responded to California's Advanced Clean Cars II regulation, with a push for several compromises to reduce the regulation's reach and stringency, see Motor Authority, October 3, 2022, Toyota CEO: California and US EV targets "difficult to really achieve" https://www.motorauthority.com/news/1137347_toyota-ceo-california-and-usev-targets-difficult-to-really-achieve

¹⁵³ Greenpeace Netherlands, 2022, Words vs. Actions, the truth behind the advertising of the car and airline industries https://www.greenpeace.org/static/planet4-netherlands-stateless/2022/05/77 8192bc-greenpeace wordsvsactions carair.pdf

¹⁵⁴ Greenpeace Netherlands, 2022, Words vs. Actions, the truth behind the advertising of the car and airline industries https://www.greenpeace.org/static/planet4-netherlands-stateless/2022/05/77 8192bc-greenpeace wordsvsactions carair.pdf

¹⁵⁵ Kasser, Tricarico, Boyle, & Simms, 2020, Advertising's role in climate and ecological degradation https://staticl.squarespace.com/static/5ebd0080238e863d04911b51/t/5fbfcb14 08845d09248d4e6e/1606404891491/Advertising%E2%80%99s+role+in+climate+ and+ecological+degradation.pdf

to pro-environmental behaviours. Companies' investments in sports and other societally relevant activities positively influence how consumers perceive the sponsoring company as well as their products. In addition, team attachment, team achievement as well as team involvement can have a positive influence on fans' perception of the sponsor as well as their purchase intentions. Knowing about the "high importance of emotions in marketing and consumer behavior" you do not have to be a marketing expert to put two and two together: whether you are an athlete or a sports fan or both, sports events are often highly emotionally charged events – creating a welcome atmosphere for sponsors who want to raise their brand awareness: advertisements on steroids.

In recent years, the term sportswashing has entered common usage. Sportswashing is related to greenwashing and whitewashing and is often used to deflect attention from morally questionable actions of the sportwashing agent. In the context of fossil fuel companies and other high carbon sponsors, sportswashing can help shift the focus away from companies' environmentally harmful practices. It also has other uses, such as improving the public image of a person, company or even state on the world stage through sport and sporting events. It is an unavoidable truth that sport is leveraged for political purposes, both domestically and internationally, and sportswashing has a long and dubious history that continues to the present day.

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Sen & Bhattacharya 2001, Does Doing Good Always Lead to Doing Better?

Consumer Reactions to Corporate Social Responsibility, Journal of Marketing Research, vol. 38, no. 2, pp. 225–243.

Hill et al., 2021, The Roar of the Crowd: How interaction ritual chains create social atmospheres, Journal of Marketing, https://doi.org/10.1177/00222429211023355

Pappas, Kourouthanassis, Giannakos, et al., 2014, Shiny happy people buying: the role of emotions on personalized e-shopping. Electron Markets 24, 193–206, p. 195. https://doi-org.ezproxy.brighton.ac.uk/10.1007/s12525-014-0153-y

Fruh, Archer & Wojtowicz, 2023, Sportswashing: Complicity and Corruption, Sport, Ethics and Philosophy, 17:1, 101-118, DOI: 10.1080/17511321.2022.2107697

Morgan, October 25, 2022, Should athletes just shut up and play ball?
https://theconversation.com/should-athletes-just-shut-up-and-play-ball-no-society-is-changing-and-sport-sponsorship-must-too-192959

A Brief History of Sportswashing

Elements of sportswashing can be traced back to the ancient Olympics in Greece in 416 BCE. In modern history, it is particularly the 1936 Olympics that comes to mind. Contrary, to all calls for a boycott, the Nazis were able to use the sporting event to obscure their anti-Jewish propaganda and their preparations for war thus being able to paint a convincing picture for many people travelling to the country resulting in an improved standing of Hitler standing in the world. In 1978, two years after a dictatorship was installed following a military coup, Argentina was allowed to host the FIFA World Cup, covering up its poor human rights record and distracting citizens from the government-orchestrated cruelties being committed at the time.¹⁶² The 2018 World Cup in Russia enabled the government to display Russia as a tolerant and liberal country, welcoming everyone to Russia whilst distracting from poor working conditions, laws discriminating LGBT people, overall questionable human rights conditions, as well as the occupation of Crimea in 2014. 163 This far from complete list of sportswash examples arguably culminated in the 2022 FIFA World Cup hosted by Qatar which the New York Times referred to as Peak 'Sportswashing'. 164 Thousands of migrant workers facing abuse and exploitation for which Qatar has continuously been called out publicly for years, lost their lives to make this World Cup happen, women and LGBT people continue to be discriminated against by Qatari law, with the latter being criminalised.¹⁶⁵ And this excludes the tournaments' environmental impact. In the case of the 2022 FIFA World Cup, for example, the organisers carbon neutrality claims concerning the tournament have been proven to be "pure greenwash: where spectators, fans, and players are being misled over the true environmental impact of the tournament". 166

Boykoff, 2022, Toward a Theory of Sportswashing: Mega-Events, Soft Power, and Political Conflict, Sociology of Sport Journal, 39(4), 342-351

Amnesty International, November 16, 2022, Qatar: Six things you need to know about the hosts of the 2022 FIFA World Cup https://www.amnesty.org/en/latest/news/2022/11/qatar-six-things-you-need-to-know-about-the-hosts-of-the-2022-fifa-world-cup/.

Daley and Simms, 2022, Caught Offside with Offsets? Why offsetting won't solve sports' climate problem.

https://staticl.squarespace.com/static/5ebd0080238e863d04911b51/t/6391fcd4
addeb96a4908f48b/1670511837653/Carbon+Offsetting+report.pdf

Ellis, October 16, 2020, Sportswashing and Atrocity: The 1978 FIFA World Cup https://yetagainuk.com/sportswashing-and-atrocity-the-1978-fifa-world-cup/

Worden, July 13, 2018, Russia's bloody World Cup https://www.hrw.org/news/2018/07/13/russias-bloody-world-cup

Bokat-Lindell, December 14, 2022, The Qatar World Cup is Peak 'Sportswashing'. But Will It Work? https://www.nytimes.com/2022/12/14/opinion/world-cup-qatar-sportswashing. html

Toyota

Overview

Comparing the ten biggest car brands of 2021, Toyota not only has the highest market share (10.5%), 167 but also the "the most sponsorship deals by an automotive brand globally"168 including the largest number of active sports sponsorship deals. As of December 2022, We estimate that Toyota Motor has 94 active deals ranging from e.g. 'Official Sponsor', 'Major Partner', 'Stadium Naming Right' to 'Principal Shirt Sponsor' and 'Sleeve Sponsor' covering 18 different sports.¹⁶⁹ Looking at both past and present deals, at least 23 different sports were covered by the car maker's sponsorship deals. Repeatedly, Toyota makes headlines with its arguably record-breaking and/or unprecedented deals.¹⁷⁰ In addition to sponsoring competitions, individual events, leagues and federations, Toyota also sponsors various sports teams, including the Japanese Red Cruisers baseball team and Japanese professional football team Nagoya Grampus Elght (once managed by Arsène Wenger, and individual athletes from across the world, including British cyclist Laura Kenny, basketballer Yuta Watanabe and paralympic swimmer Sophie Soon.¹⁷¹

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Statista, 2022, Car brand market share worldwide 2021 https://www.statista.com/statistics/316786/global-market-share-of-the-leading-automakers/

SponsorUnited, August 26, 2021, SponsorUnited Releases Automotive
Sponsorships 2020-21 Annual Report
https://www.prnewswire.com/news-releases/sponsorunited-releases-automotive-sponsorships-2020-21-annual-report-301363436.html

See footnote #148 for selected sources.

The Guardian Sport, March 15, 2019, AFL in \$18.5m-a-year sponsorship deal with Toyota, reportedly largest ever in Australia https://www.theguardian.com/sport/2019/mar/15/afl-in-185m-a-year-sponsor ship-deal-with-toyota-reportedly-largest-ever-in-australia; Wilson, n.d., Toyota drives onto Olympic stage in record sponsorship deal https://eu.usatoday.com/story/sports/olympics/2015/03/13/toyota-drives-onto-olympic-stage-in-record-sponsorship-deal/70258812/; SportBusiness Sponsorship, November 26, 2015, Toyota pens 'monumental' deal with Paralympic movement https://sponsorship.sportbusiness.com/news/toyota-pens-monumental-deal-with-paralympic-movement/

¹⁷¹ Toyota Times, n.d., Overview of Global Team Toyota Athletes https://toyotatimes.jp/en/sports/teams_athletes/athlete/

Case Studies

Olympic Games

The oldest known, continuing sports event in the world, the Olympic Games, continues to attract the interest of sports enthusiasts all over the world. "A total of 2.01 billion unique viewers tuned in to watch coverage from Beijing across linear TV and digital platforms"¹⁷² with "a combined 713 billion minutes of Games coverage on Olympic Media Rights Partners' channels"¹⁷³ being watched. Originally to celebrate the apex of physical performance and theoretically bring nations together (although its history is also steeped in emulating the skill sets and ambitions of colonialism and empire), the Olympics has become big business, with a turnover of many millions of dollars.

Despite Paris mayor Anne Hidalgo's warning to the Paris 2024 chief highlighting the difficulty for citizens "to identify with companies whose activity would have a big impact on the environment" resulting in Total opting out to sponsor the Paris 2024 games, other sponsors from carbon-intensive industries, including Toyota are still major sponsors of the games.

Since 2017, Toyota has been among the main sponsors of the Olympic Games. It is the first time a car company has been among the International Olympic Committee's (IOC) top-tier sponsors, which includes 11 other brands – among them Coca Cola and McDonald's.¹⁷⁵

The eight year deal between the IOC and Toyota (1.1.2017-31.12.2024) is supposedly worth \$1.6 billion and grants Toyota "exclusive partnership rights in the mobility category, which include vehicles, mobility services and mobility solutions".¹⁷⁶ Both at international and national level,

France 24, June 5, 2019, Total pull sponsorship plug on 2024 Olympics over 'eco-Games'

https://www.france24.com/en/20190605-total-pull-sponsorship-plug-2024-olympics-over-eco-games (09.01.2023)

40

¹⁷² IOC, October 20, 2022, Olympic Winter Games Beijing 2022 watched by more than 2 billion people https://olympics.com/ioc/news/olympic-winter-games-beijing-2022-watched -by-more-than-2-billion-people

¹⁷³ Ibid

SportBusiness Sponsorship, March 13, 2015, IOC adds to Japanes top-tier partners with Toyota deal https://sponsorship.sportbusiness.com/news/ioc-adds-to-japanese-top-tier-partners-with-toyota-deal/

SportBusiness Sponsorship, March 13, 2015, IOC adds to Japanes top-tier partners with Toyota deal

exclusively vehicles from the Japanese car manufacturer are used by, for example, athletes, coaches and IOC officials, giving Toyota a unique presence. With the huge interest in the Olympic Games across social media (up to 3.2 billion engagements during the Game period) and other digital platforms (68 million users), sponsoring the Olympics provides companies with unrivalled opportunities to showcase their products and raise brand awareness.¹⁷⁷

Or, alternatively, it provides a vast captive audience to tell the world about their commitments to sustainability, with Toyota recognised as the IOC's key partner concerning sustainable mobility solutions.¹⁷⁸ Given the information presented in Chapter 2, Toyota's positioning as a pioneer of sustainable mobility solutions is questionable at best.

In addition to the sponsorship of the Olympic Games, Toyota is also supporting various Olympic and Paralympic teams such as the Olympic Committees of Germany, Italy and New Zealand, as well as being an official sponsor of the Paralympic Games.¹⁷⁹ One of the marketing objectives behind these partnerships "was to bring to life Toyota's belief in 'the power of sport and movement as one' and that 'when we move, we can achieve the impossible'".¹⁸⁰

https://sponsorship.sportbusiness.com/news/ioc-adds-to-japanese-top-tier-partners-with-tovota-deal/

¹⁷⁷ IOC, October 20, 2022, Olympic Winter Games Beijing 2022 watched by more than 2 billion people https://olympics.com/ioc/news/olympic-winter-games-beijing-2022-watched-by-more-than-2-billion-people.

USA Today Sports, n.d., Toyota drives onto Olympic stage in record sponsorship deal https://eu.usatoday.com/story/sports/olympics/2015/03/13/toyota-drives-onto-olympic-stage-in-record-sponsorship-deal/70258812/

France 24, June 5, 2019, Total pull sponsorship plug on 2024 Olympics over 'eco-Games'
https://www.france24.com/en/20190605-total-pull-sponsorship-plug-2024-olympics-over-eco-games

SportBusiness Sponsorship, August 20, 2021, The Jessica Long Story – Toyota & the IPC/IOC/Team USA https://sponsorship.sportbusiness.com/2021/08/the-jessica-long-story-toyota-the-ipc-ioc-team-usa/



Toyota positions itself as a 'sustainable transport partner' even as it obstructs environmental measures and plans production of huge numbers of fossil fuel powered cars

Australian Football League

The Australian Football League (AFL) is Australia's most watched sport and ranks 4th in the top 10 Sports Leagues in terms of attendance.¹⁸¹ The AFL's average crowd of 33,600 is only topped by the Premier League (3), the Bundesliga (2) and the NFL (1).¹⁸² Despite there being a decrease in viewership compared to previous years, "the [AFL] grand final was still the countries' number one TV program"¹⁸³. The AFL is

The Roar, December 5, 2022, What is Australia's most popular sport?

https://www.theroar.com.au/2022/12/06/what-is-australias-most-popular-sport/

TotalSportal, February 12, 2022, Sports League With Highest Attendance https://www.totalsportal.com/list/sports-league-with-highest-average-attendance/

Ward, September 25, 2022 Seven renews push for night grand final after ratings slum for one-sided decider https://www.theage.com.au/sport/afl/seven-renews-push-for-night-grand-final-after-ratings-slump-for-one-sided-decider-20220925-p5bkts.html

very present in the media – even when there is a break¹⁸⁴ – and, in 2020, formed Australia's biggest rights holders together with the National Rugby League, Cricket Australia and Rugby Australia. Together, they were said to "generate approximately A\$188.5m (€111.5m/\$122.9m) in sponsorship revenue across a total of 115 deals"185 with Toyota being the biggest spending brand across the properties. Although difficult to establish directly, it is reasonable to assume that Toyota's presence in Australian sports supported it being the "most popular vehicle brand among Australians who intend[ed] to purchase a new car within the next four years" in 2019. Since then, Toyota's relationships in Australia have become more problematic. In 2022 a ruling by the Federal Court on a class action about faulty toyota diesel filters exposed the car maker to fines potentially totalling \$2 billion. Later in 2022 another class action was brought in Australia against the car maker alleging 'emissions cheating' on nearly 500,000 vehicles.¹⁸⁷ Then in March 2023, Toyota was reported to the Australian Competition and Consumer Commission (ACCC) for alleged misleading claims about the environmental performance of its vehicles and climate targets. If ruled against, the company could face further fines of \$50 million.¹⁸⁸

With the extension of the partnership between Toyota Australia and the Australian Football League, which has been ongoing for almost 20 years, the \$74 million deal is considered "the largest sports sponsorship deal in Australian corporate history". In addition to becoming the AFL's official community partner and the AFLW competition's official automotive partner, Toyota can add new assets to already existing naming rights, including the National Volunteer

¹⁸⁴ The Roar, December 5, 2022, *Op. cit.*

SportBusiness Sponsorship, May 20, 2020, Data Snapshot: Australia 2020 https://sponsorship.sportbusiness.com/2020/05/data-snapshot-australia-2020 [(28.12.2022)

Roy Morgan, November 8, 2019, Toyota the most popular brand among those with sights set on a new car https://www.roymorgan.com/findings/toyota-the-most-popular-brand-among-those-with-sights-set-on-a-new-car

Drive.com.au, 18 October 2022, Toyota hit with new legal class action over diesel emissions https://www.drive.com.au/news/toyota-hit-with-new-legal-class-action-over-diesel-emissions/

The Driven, 6 March 2023, Toyota could face \$50 million "greenwashing" fine after referral to consumer watchdog https://thedriven.io/2023/03/06/toyota-could-face-50-million-greenwashing-fine-after-referral-to-consumer-watchdog/

Gouveia, March 15, 2019, AFL inks record \$74 million sponsorship deal with Toyota
https://www.adnews.com.au/news/afl-inks-record-74-million-sponsorship-deal-with-toyota

Awards, the National Inclusion Carnival, the North East Australian Football League (NEAFL), and the National Wheelchair Championships¹⁹⁰ – which, obviously, provides Toyota with significant exposure.



Toyota's branding can be found all over sport across the world

BMW

Overview

The tenth-largest car brand, BMW, ranks 4th with its 31 known active sport sponsorship deals (after Ford Motor Company with 43 and Hyundai Motor Group with 39 active deals as of December 2022).¹⁹¹ The BMW Group's sport sponsorship deals (past and present) comprise at least 21 different sports and range from e.g. 'Competition Naming Right', 'Official Partner' to 'Secondary Shirt Sponsor'. In 2017, motorsport, golf and

¹⁹⁰ *Ibid.*

¹⁹¹ Ctest

¹⁹¹ Statista, 2022, Car brand market share worldwide 2021 https://www.statista.com/statistics/316786/global-market-share-of-the-leading-a-automakers/

sailing were identified as the group's key strategic areas.¹⁹² In particular, the long-term sponsorship of the PGA golfing event (title sponsor since 2007)¹⁹³, which is "one of the most recognised events in the world of professional golfing", 194 highlights the level of exposure BMW has achieved through the sport of golf.

Events that BMW is organising or lending their name to as part of a title sponsorship, provide the carmaker with extensive branding opportunities, as well as the possibility to work closely with sports associations or event organisers to strengthen their influence: on the organisation, on advertising quidelines, TV appearances or on the sport itself. 195 The influence of such deals is often diffuse and hard to map. The mere presence and behind-the-scenes awareness of the sponsor can exert influence that goes beyond the letter of contracts. The issue has emerged, for example, in the sponsorship of elite cultural institutions by fossil fuel companies.¹⁹⁶ In addition, BMW signs individual athletes as BMW brand ambassadors such as Magdalena Neuner (Biathlon),¹⁹⁷ Allesandro Zanardi,¹⁹⁸ Russian tennis player Daniil Medvedev¹⁹⁹ and New Zealand former international rugby

n-to-remain-title-sponsor-of-the-bmw-championship?language=en

45

Rehm, September 2, 2017, Für welche Sportarten BMW Geld ausgibt https://www.manager-magazin.de/unternehmen/autoindustrie/bmw-fuer-wel che-sportarten-und-events-bmw-als-sponsor-auftritt-a-1165228.html

Pressclub Global, November 22, 2021, BMW announces five-year agreement with the PGA TOUR and Western Golf Association to remain title sponsor of the BMW Championship https://www.press.bmwgroup.com/global/article/detail/T0360792EN/bmw-ann ounces-five-year-agreement-with-the-pga-tour-and-western-golf-associatio

CEO Today, February 28, 2018, Why Do Audi, BMW & VW Sponsor Sports? https://www.ceotodavmagazine.com/2018/02/whv-do-audi-bmw-vw-sponsor -sports/

Rehm, September 2, 2017, Für welche Sportarten BMW Geld ausgibt https://www.manager-magazin.de/unternehmen/autoindustrie/bmw-fuer-wel che-sportarten-und-events-bmw-als-sponsor-auftritt-a-1165228.html

See the work of Culture Unstained on institutions such as the UK's Science Museum and British Museum: https://cultureunstained.org/

Pressclub Deutschland, September 14, 2016, Ausnahme-Biathletin Magdalena Neuner neue Markenbotschafterin https://www.press.bmwgroup.com/deutschland/article/detail/T0263692DE/aus nahme-biathletin-magdalena-neuner-neue-bmw-markenbotschafterin-neun er-im-interview:-%E2%80%9Eunsere-partnerschaft-ist-familiaer-und-authentis ch%E2%80%9C?language=de

Pressclub Global, December 12, 2021, Back home: BMW Group Ambassador Alessandro Zanardi continues his recovery process at home https://www.press.bmwgroup.com/global/article/detail/T0363093EN/back-ho me:-bmw-group-ambassador-alessandro-zanardi-continues-his-recovery-pr ocess-at-home?language=en

Sport Business Journal, September 18, 2019, BMW Group Russia Medvedev As Brand Ambassador https://www.sportsbusinessjournal.com/Daily/Morning-Buzz/2019/09/18/BMW.as

player and cricketer Jeff Wilson.²⁰⁰ While the German carmaker invested heavily in e-sports in 2020, moving into 2023 e-sports sponsorship has been reduced.²⁰¹

Case Studies

PGA Championship

The Professional Golfers Association (PGA) organises over 700 tournaments on a local, national and international level every year.²⁰² According to SportBusiness Sponsorship, "[t]he PGA Tour, the DP World Tour and the four golf majors - The Masters, Open Championship, PGA Championship and US open – held sponsorship portfolios valued at \$575m (€568.4m/£480.3m) in 2022 compared to \$519m in 2021". 203 In 2015, 113,640 spectators came to see the golfers compete at BMW PGA Championship taking place in Surrey, England, being "one of the flagship events on the DP World Tour". 204 In 2020, when the tournaments in the UK were played without spectators due to Covid, Sky Sports "reported the highest recorded viewing figures for European Tour events since data collection began"²⁰⁵ with over 750,000 tuning in on BBC for the "highlights of the Aberdeen Standard Investment Scottish Open and BMW PGA Championship". 206 The increasing interest was also reflected in social media engagements.

To get the tournament up and running, pay prize money (an overall purse of \$8 million of which \$1.36 million goes to the winner),²⁰⁷ the event relies on BMW and other sponsors such

Edwards, March 2, 2015, 'Goldie' signs on with BMW https://autotalk.co.nz/news/goldie-signs-bmw

Sacco, December 15, 2022, BMW reduces spend in esports sponsorship spend moving into 2023
https://esports-news.co.uk/2022/12/15/bmw-pulls-esports-sponsorships/

PGA, n.d., Our tournaments https://www.pga.info/about-the-pga/tournaments/

²⁰³ Glendinning, October 13, 2022, *Data Snapshot. Golf 2022*https://sponsorship.sportbusiness.com/2022/10/data-snapshot-golf-2022/?log aged_in=1

²⁰⁴ Koobit, n.d., *BMW PGA Championship* https://www.koobit.com/bmw-pga-championship-e1135

DP World Tour, October 15, 2020, Major surge in viewing figures for Rolex Series events https://www.europeantour.com/dpworld-tour/rolex/news/articles/detail/major-surge-in-viewing-figures-for-rolex-series-events/.

²⁰⁶ Ibio

Redington, September 11, 2022, Here's the prize money payout for each golfer at the 2022 BMW PGA Championship https://www.golfdigest.com/story/here-is-the-prize-money-payout-for-each-golfer-at-the-2022-bmw-pga-championship

as Zoom, Rolex and Hilton to cover its expenses.²⁰⁸ Together with DP World and Rolex, BMW is said to form the DP World Tour's top three sponsors and has been supporting the European Golf Tour for more than 30 years.²⁰⁹



BMW sponsors sports that position it as a luxury brand

During a four-year lasting sponsorship deal, German car manufacturer BMW was estimated to provide more than €53 million to the Ryder Cup and European Tour.²¹⁰ In addition to being granted continued naming rights for the BMW PGA

Sullivan, September 7, 2022, With Money, Sponsors and Rival Golf Tours, It's Hard to Keep Everyone Happy https://www.nytimes.com/2022/09/07/sports/golf/bmw-pga-championship-liv-golf-pga-tour-sponsors.html

Glendinning, December 13, 2022, BMW targets young golf audience with DP World Tour renewal https://sponsorship.sportbusiness.com/news/bmw-targets-young-golf-audien ce-with-dp-world-tour-renewal/

Glendinning, December 14, 2018, BMW ups commitment to Ryder Cup and European golf https://sponsorship.sportbusiness.com/2018/12/bmw-ups-commitment-to-ryd er-cup-and-european-golf/

Championship in Surrey, England, and the BMW International Open in Munich, the car manufacturer continues to enjoy "highly visible branding and product placement opportunities at DP World Tour tournaments each season.²¹¹ This also included exposure in media, the Tour's digital platforms, as well as at the Tour's premium hospitality services, the latter allowing BMW to "create unique customer experiences".²¹² Being the DP World Tour's official car, Tour officials and players are provided with all-electric BMW vehicles.²¹³ Furthermore, already existing BMW customers received special treatment on site.²¹⁴

Real Madrid

Football is the most popular sport in Spain with La Liga, the Spanish first division, being among the top five European football leagues. Real Madrid is one of the most successful football clubs in the world, boasting 95 domestic and international titles in their 120 year history. Arguably, it is the team with the most fans worldwide whose games were watched by an average of 1,256,293 TV viewers in 2017 in Spain alone. Yet the club not only stands out for its sporting performance, its brand is also considered "one of the most valuable brands in the sports sector". More than 252 million people follow the Spaniards on Instagram, Twitter and Co, and (former) players like Cristiano Ronaldo (536 million) and Karin Benzema (64.5 million) belong to the most followed footballers on Instagram. To become aware of the possible influence, one only has to think back to the Euro 2020 and

Golf Business News, December 13, 2022, BMW sign five-year extension to DP World Tour sponsorship

https://golfbusinessnews.com/news/sponsorship-and-events/bmw-sign-five-year-extension-to-dp-world-tour-sponsorship/

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Drivewrite Automotive, January 26, 2018, Automotive Sponsorships https://drivewrite.co.uk/automotive-sponsorships/

Glendinning, December 13, 2022, BMW targets young golf audience with DP World Tour renewal https://sponsorship.sportbusiness.com/news/bmw-targets-young-golf-audience-with-dp-world-tour-renewal/

²¹³ Ibic

Das, December 20, 2022, Top 10 Most Successful Spanish Football Clubs Of All Time https://sportsbrowser.net/most-successful-spanish-football-clubs/

Goal, February 12, 2021, Which football teams have the most fans?

https://www.goal.com/en-gb/news/which-football-teams-have-most-fans/1qma4i3457wvhlkxkb7qbdo7qn

McMahon, April 6, 2018, Real Madrid Getting The Better of Barcelona In Both TV Audience And Home Attendance This Season https://www.forbes.com/sites/bobbymcmahon/2018/04/06/real-madrid-leads-barcelona-in-both-tv-audience-and-home-attendance-this-season/

Baena, 2016, Online and mobile marketing strategies as drivers of brand love in sports teams: Findings from Real Madrid, International Journal of Sports Marketing and Sponsorship, Vol. 17 No. 3, pp. 202–218

Cristiano Ronaldo removing a bottle of Coca Cola at a press conference, which caused the drink producer severe reputational damage.²¹⁹

While there were times when BMW claimed that football as not that interesting for their sponsorship strategy, as they would just be one sponsor among many others,²²⁰ this seems to have changed over the years with BMW sponsoring several football teams including Real Madrid,²²¹ AC Milan,²²² UD Almería²²³ and the Belgian National Football Team.²²⁴

2

The Athletic, June 15, 2021, Ronaldo's Coca Cola gesture followed by \$4bn drop in company's market value https://theathletic.com/news/cristiano-ronaldo-coca-cola-euro-2020/HO8sDj MJqPLh/

Rehm, September 2, 2017, Für welche Sportarten BMW Geld ausgibt https://www.manager-magazin.de/unternehmen/autoindustrie/bmw-fuer-welche-sportarten-und-events-bmw-als-sponsor-auftritt-a-1165228.html

Diario As, July 13, 2022, Real Madrid announce BMW sponsorship deal: what cars will the players get?

https://en.as.com/soccer/real-madrid-announce-bmw-sponsorship-deal-what-cars-will-the-players-get-n/

AC Milan, March 31, 2021, AC Milan and BMW together to reshape thefuture https://www.acmilan.com/en/news/articles/sponsor/2021-03-31/ac-milan-and-bmw-together-to-reshape-the-future

UD Almería, December 5, 2020, UD Almería and BMW complete a major sponsorship deal

Lepitak, June 1, 2021, BMW Celebrates Belgium's Empty Streets to Support National Team in Uefa Euro 2020 Games



Famous athletes make powerful lifestyle role models

In 2022, BMW succeeded Audi, which had been sponsoring Real Madrid for almost 20 years, and will now supply "players and coaches of the men's and women's soccer first teams, and the club's basketball squad"²²⁵ with one of their fully electric vehicle fleets. As part of this one year partnership worth an estimated \$19.3 million, BMW becomes the club's 'Sustainable Mobility Partner'.²²⁶ This partnership will purportedly establish "a shared sustainability center with numerous initiatives in various diversity and sustainability-related fields"²²⁷ such as future mobility and

Diario As, July 13, 2022, Real Madrid announce BMW sponsorship deal: what cars will the players get?

https://en.as.com/soccer/real-madrid-announce-bmw-sponsorship-deal-what-cars-will-the-players-get-n/

Williams, July 14, 2022, Real Madrid replaces Audi with BMW https://sponsorship.sportbusiness.com/news/real-madrid-replaces-audi-with-bmw/

Marca, June 23, 2022, Real Madrid changes its sponsorship from Audi to BMW! https://www.marca.com/en/football/real-madrid/2022/06/24/62b4ea35268e3 ecf458b458f.html

diversity.²²⁸ Again, considering the information provided in section 2, this partnership makes the company and its sustainability efforts look much better than they actually are.

Mahadik, July 15, 2022, *Real Madrid land partnership with BMW* https://sportsmintmedia.com/real-madrid-land-partnership-with-bmw/

4. Why sport should drop and avoid major polluters

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How global heating impacts on sport

The impacts of climate change on sport are becoming steadily impossible to ignore. Not only are fans and athletes vulnerable to the impacts of climate change, but the loss of a temperate and predictable climate poses an existential risk to whole sports. Former Olympic Marathon Runner Mara Yamauchi says:

Sport, like all the activities we humans do on Earth, is increasingly affected by climate change... Extreme weather events occurring more frequently might lead to more major sporting events being disrupted or cancelled. And the impact of climate change on the natural environments where sports events take place, could also have far-reaching effects.²²⁹

Sports like football and cricket are vulnerable to the fluctuations between drought and flooding that rises in global temperatures are making more frequent and severe; winter sports are increasingly exposed to the loss of snow; golf is suffering from coastal erosion accelerated by rising sea levels, and athletes from across the sporting world are struggling to adapt to heat and air quality impacts wrought by widespread fossil-fuel reliance.²³⁰

Many of the most direct climate impacts on sport fall under three core and connected themes: 1) disruption to play; 2) health of participants and spectators; and 3) declining participation.

BASIS, 2021, Rings of Fire; How heat could impact the 2021 Tokyo Olympics https://basis.org.uk/rings-of-fire

The Climate Coalition, 2018, Game Changer; How climate change is impacting sports in the UK https://www.theclimatecoalition.org/gamechanger

Disruption to play

Sport that takes place outdoors has always been vulnerable to weather changes, but climate change is making those impacts more frequent and severe. Moving the sporting calendar around to avoid extreme weather is becoming more commonplace, but often leads to negative impacts on performance, preparation and fan experience.

In January 2023, only two weeks out from competition, the Para-snowboard World Championships were postponed to March 2023. The International Ski and Snowboard Federation attributed the decision to 'the unseasonable warm temperatures across much of central Europe over the holidays [which] have created a current critical snow situation.'²³¹ For athletes whose race-schedules were likely fine-tuned for a January competition, this two-month delay is extreme – and poses a significant alteration for fans planning to attend as well.

Within the same fortnight, fans faced disruption when extreme heat and rain prompted delays in the scheduled play of the Australian Open. Seventeen of Day Two's matches were either stopped midway or did not begin, when temperatures topped 35°C and severe rain then delayed the evening play.²³² The resultant scheduling challenges played out over the rest of the tournament, including Andy Murray playing a second-round match which finished after 4am. Post-match, Murray reflected "It's not beneficial for the umpires, the officials. I don't think it's amazing for the fans. It's not good for the players".²³³

These instances are just the latest in a growing cacophony of scheduling shifts in the last few years, which includes the 2019 marathon at the Doha World Championships being moved to take place during the night,²³⁴ the Tokyo Olympic swim test event being cancelled for para-triathletes,²³⁵ kick-off to the women's 2020 Olympic football final being delayed by ten

BBC, January 7, 2023, Para-snowboard World Championships postponed because of lack of snow https://www.bbc.co.uk/sport/disability-sport/64199026

BBC, January 17, 2023, Australian Open 2023: Melbourne heat and rain stops play on outdoor courts https://www.bbc.co.uk/sport/tennis/64300081

BBC, January 20, 2023, Australian Open 2023: Andy Murray calls 4am finishes in tennis a 'farce' https://www.bbc.co.uk/sport/tennis/64339932

Yahoo!Sports, September 28, 2019, 'Boiling' heat in Qatar leads to 41 percent of runners failing to finish marathon at World Championships https://vhoo.it/35TsbsC

²³⁵ Rings of Fire, Op. cit.

hours,²³⁶ and the Manitoba Marathon 2022 being cancelled when runners were an hour into the race.²³⁷

At its most extreme, severe weather events (which climate change significantly increases the likelihood of) can totally ruin seasons. An example is the impacts of Storm Desmond in 2015 to clubs like Carlisle United FC – who were forced from their ground for 49 days with repair costs of nearly £200,000 – and Appleby and Eden Cricket Club in Cumbria, whose grounds suffered 'irreparable damage' from flooding. Zooming out from a single storm to longer-term trends, between 2000–2018 Glamorgan Cricket Club sacrificed 217 days – or 20,000 overs – of cricket to poor conditions. Zooming.

Climate modelling found that Storm Desmond was made 59% more likely as a result of climate change.²⁴⁰ The devastation wrought by such storms makes it all the more concerning that Met Office projections suggest that winter rainfall could increase by 70–100% by the 2080s, with experts predicting that this could leave almost a quarter of England's Premier League football clubs experiencing partial or total flooding by 2050.²⁴¹ Although these extreme weather events have an impact on all of sport, the impacts are not felt equally. Larger and more financially resilient organisations often have the resources to fund timely repairs and adaptation measures to prevent ongoing disruption, while the teams, clubs and fans in the lower leagues and at the grassroots level suffer huge disruptions without any recourse.

The Guardian, August 5, 2021, Kick-off and venue of women's Olympic football final changed amid heat fears

https://www.theguardian.com/sport/2021/aug/05/kick-off-women-olympic-football-final-delayed-heat-fears-sweden-canada

CBC, June 19, 2022, Manitoba Marathon cancelled mid-race as mercury climbs to dangerous levels https://www.cbc.ca/news/canada/manitoba/manitoba-marathon-2022-heat-warning-1.6493963

Game Changer, Op. cit; see News & Star, June 1, 2017, Ruined cricket club gets go-ahead to rebuild flood-hit pavilion https://www.newsandstar.co.uk/news/16699275.ruined-cricket-club-gets-go-ahead-to-rebuild-flood-hit-pavilion/; University of Leeds, 2017, Hit for Six; The Impact of Climate Change on Cricket https://www.thefa.com/-/media/cfa/birminghamfa/files/save-today-play-tomorrow/hit-for-six-the-impact-of-climate-change-on-cr.ashx?la=en

Game Changer, Op. cit.

²⁴⁰ Ibid

²⁴¹ Ibid.; D. Goldblatt, 2020, Playing against the clock: Global sport, the climate emergency and the case for rapid change https://www.rapidtransition.org/resources/playing-against-the-clock/

Harms to health

Of even greater concern is the risks posed to health when organisers don't pay sufficient heed to extreme conditions. Athletes are increasingly facing conditions that their physiologies cannot adapt to, and air pollution is impacting athletes' lung function and posing severe health impacts to sports fans and communities. In some sense, athletes are the canaries in the coalmine when it comes to humanities' ability to adapt to a warmer and more unpredictable climate.

Heat

The Los Angeles Marathon in 2015, which took place during record-breaking temperatures of 32°C (since surpassed), saw nearly 200 runners needing medical attention and the hospitalisation of more than $30.^{242}$ The same impacts occur at elite level, as seen at the 2019 World Championships in Doha when during the women's marathon 28 out of 68 runners failed to reach the finish line in conditions of 32°C, despite the scheduling change which saw the race run at midnight.²⁴³ Such conditions are now far from exceptional for many sporting events. At its most mild, the impacts of higher temperatures can include poorer performance due to worsening cognitive processing and increased chances of heat exhaustion and of heat stroke. At their Tokyo Olympics test event in August 2019, three rowers required medical attention after suffering from suspected heatstroke, with temperatures reaching 33.7°C before 10am.²⁴⁴ The year before England's Cricket Captain that, Joe Roots required hospitalisation after playing in 37°C.²⁴⁵

In the most severe cases (above temperatures of 38–40°C) there is a risk of organ failure and death.²⁴⁶ Describing a

NBC News, March 16, 2015, More Than 30 Hospitalized During Sweltering Los Angeles Marathon
https://www.nbcnews.com/news/us-news/more-30-hospitalized-during-sweltering-los-angeles-marathon-n324021

²⁴³ Rings of Fire, Op. cit.

²⁴⁴ Ibid

BBC, May 18, 2021, Joe Root: England captain on impact of climate change on cricket https://www.bbc.co.uk/sport/cricket/57126777

²⁴⁶ Hit for Six, Op. cit; New Weather Institute, 2021, Sweat Not Oil
https://www.rapidtransition.org/wp-content/uploads/2021/03/SweatNotOil-why
Sportsshoulddropadvertisingfromhighcarbonpolluters-March2021v3.pdf; see
The Climate Institute, 2014, Sport & Climate Impacts: how much heat can sport
handle?

Triathlon World Series race in Mexico in 2016, double Olympic Champion Alistair Brownlee explained:

Racing in the heat adds extra layers of physical and mental challenges. The results of getting it wrong can be dangerous and even fatal. I saw this first hand when my brother, Jonny, (a little famously) got it wrong in Mexico and suffered from heat stroke.²⁴⁷

The most severe impacts of extreme heat were also alluded to by World No. 8 Daniel Medvedev during the Tokyo Olympics when he challenged the umpire "I can finish the match, but I can die... If I die, are you going to be responsible?" ²⁴⁸ Daniel Medvedev recently signed a new sponsorship deal with BMW. ²⁴⁹ Winter sports reveal additional risks to athletes as a result of the increased temperatures. Jessica Jislová, an Olympian biathlete who competed at both the South Korea 2018 and Beijing 2022 Winter Games says:

The extreme weather changes can be dangerous for athletes. When one week you are racing in -20°C and next week in +5°C, your body is under a lot of pressure trying to adapt.²⁵⁰

https://www.connect4climate.org/sites/default/files/files/publications/Sport_and_climate_report.pdf

²⁴⁷ Rings of Fire, Op. cit.

ESPN, July 28, 2021, 'I can finish the match, but I can die': Daniil Medvedev struggles with extreme heat in advancing to Olympic men's tennis quarterfinals https://www.espn.co.uk/olympics/summer/tennis/story/_/id/31902170/i-finish-match-die-daniil-medvedev-struggles-extreme-heat-advancing-olympic-men-tennis-quarters

Essentially Sports, Jan 21 2021, "Outstanding Athlete": Daniil Medvedev Signs a New Contract With BMW, https://www.essentiallysports.com/outstanding-athlete-daniil-medvedev-signs-a-new-contract-with-bmw-atp-tennis-news/

Loughborough University London, 2022, Slippery Slopes; How climate change is threatening the Winter Olympics https://www.sportecology.org/_files/ugd/a700be_9aa3ec697a39446eb11b8330aec19e30.pdf

Her fellow-Olympian Laura Donaldson (Salt Lake City 2002) identifies the impact on conditions as a further threat, explaining:

Jump take-offs can be excessively icy and slippery, bad take-offs directly contribute to bad landings. It is dangerous for an athlete if take-offs and landings are formed from sheets of ice [...] If Freestyle super pipes are formed from snow-making machines in a poor season, the walls of the pipe are solid, vertical ice and the pipe floor is solid ice. This is dangerous for athletes, some have died.²⁵¹

Pollution

Air pollution poses a significant threat to the health of sports participants and wider populations at large. This factor is relevant to an assessment of BMW and Toyota's sponsorship in sport, because (in addition to their impact on climate) transport emissions are a primary contributor to air pollution with both vehicle makers being embroiled in 'emissions cheating' scandals. And the two issues – climate change and air pollution – are further interlinked: as well as much air pollution being generated from the same emission-heavy sources that lead to climate change (most commonly power generation and road transport), rapidly shifting and unpredictable weather patterns can trap damaging levels of particulates in localised and urban areas, exacerbating health impacts related to these pollutants.²⁵²

What we breathe not only enters our lungs but also our bloodstream, leading to 'damage at a cellular level, leading long term to ailments such as heart and lung disease, cancer, and asthma'. Studies are increasingly linking air pollution to other health impacts including mental health deterioration and exacerbated Covid symptoms. Air pollution caused by

²⁵¹ Ibid.

²⁵² Rings of Fire, Op. cit.

²⁵³ Ibid.; see Transport & Environment, 2021, Road vehicles and air quality https://www.transportenvironment.org/what-we-do/air-quality-and-transport/ road-vehicles-and-air-quality

Sweat not Oil, Op. cit.; see The BMJ Opinion, November 28, 2019, The dangers of air pollution for human health https://blogs.bmj.com/bmj/2019/11/28/yaguang-wei-the-dangers-of-air-pollution-for-human-health/; The BMJ, 2019, The health effects of fine

car travel was linked to around 385,000 premature deaths worldwide in 2015,²⁵⁵ and in the UK more than one in 19 deaths are linked to air pollution.²⁵⁶ According to the OECD, air pollution is set to become the leading cause of premature death by 2050, claiming 3.6 million lives a year.²⁵⁷

Large cities like London, Tokyo, Beijing and Paris – all recent or future hotspots for major international sporting events – all record dangerously high levels of air pollution, with 4,000 deaths attributed to air pollution last year in London alone (mostly generated through combustion processes), and nitrogen oxide levels (which accounts for approximately 70% of damaging pollutants) in Paris consistently reading over the EU legal limit. Such is the level of pollution in Paris – host city of the 2023 Rugby World Cup and 2024 Olympics – that a study conducted by the European Transport and Environment Association showed just a four day visit would have a similar health impact to smoking two cigarettes.

Reduction to participation

A final inevitable impact of the increasingly hostile environment in which sports take place is the risk of decreasing participation rates. This threatens the financial sustainability of certain sports, reduces the pool from which new sporting talent can emerge and, most devastatingly, forms a barrier to the health and enjoyment benefits that so many derive from sport – the 'legacy' that sits at the heart of so many sports and global sporting events.

As the *Game Changers* report warned in 2018 with regard to cricket, the greatest risk:

particulate air pollution https://www.bmj.com/content/367/bmj.16609/rr-2; N. N. Ali and A. Khoja, 2019, Growing Evidence for the Impact of Air Pollution on Depression https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6447209/

²⁵⁵ ICCT, 2019, A Global Snapshot of the Air Pollution-Related Health Impacts of Transportation Sector Emissions in 2010 and 2015 https://theicct.org/publication/a-global-snapshot-of-the-air-pollution-related -health-impacts-of-transportation-sector-emissions-in-2010-and-2015/

Centre for Cities, 2020, Cities Outlook 2020 https://www.centreforcities.org/publication/cities-outlook-2020/

OECD, 2012, Environmental Outlook to 2050: The consequence of Inaction https://www.oecd.org/environment/indicators-modelling-outlooks/49928853.pdf

Mayor of London, June 16, 2022, Clean Air Day 2022: Action on reducing London's pollution cannot wait https://www.london.gov.uk/city-hall-blog/clean-air-day-2022-action-reducing-londons-pollution-cannot-wait

²⁵⁹ Rings of Fire, Op. cit.

[...] is that increasingly disrupted cricket will lead people to eventually give up and do something else. Indeed, nearly 40,000 fewer people played cricket in 2015/6 than in 2005/6, a fall of almost a fifth.²⁶⁰

The new year began with a stark reminder across Europe of the particular threat temperature rises pose to snow sport participation, with unprecedented temperatures forcing France to close more than half its ski slopes.²⁶¹ Samuel Morin, a research scientist at Météo-France, calculates that 'resorts at low elevation have lost about a month of ski season on average over the past 50 years', and estimates that every 1°Cof global temperature rise will shorten ski seasons a month of natural snow.²⁶² Current predictions of global temperature rises of 2.4°C would obliterate the whole season.

In 2021 the University of Waterloo determined that, of the 21 hosts for the Winter Olympics to date, 'only Sapporo in Japan would have the necessary conditions to host them again in a safe and fair way by the end of the 21st century if there is not a drastic reduction in greenhouse gases'. Cue the Beijing 2022 Winter Olympics, when the snow athletes competed on was entirely man-made, 'the result of an estimated 49 million gallons of chemically-treated water frozen through snow machines, an energy-intensive process that is costly and potentially damaging in water-stressed areas.'

Not only does the process of generating artificial snow often come at a significant environmental cost and potentially risk water scarcity for those who rely on the water sources used,

²⁶⁰ Game Changer, Op. cit.

The Times, January 6, 2023, Does skiing have a future?
https://www.thetimes.co.uk/article/does-skiing-have-a-future-ssxbwdtvj; The Times, January 2, 2023 Ski holiday hopes go downhill as Alpine snow melts away

https://www.thetimes.co.uk/article/ski-holiday-hopes-go-downhill-as-alpine-s now-melts-away-kd9wf076k

The Times, January 6, 2023, Op. cit.

Slippery Slopes, Op. cit.; see Current Issues in Tourism, 2021, Climate change and the future of the Olympic Winter Games: athlete and coach perspectives https://doi.org/10.1080/13683500.2021.2023480

²⁶⁴ Slippery Slopes, Op. cit.

but the financial cost is likely to make participation increasingly – and for many, prohibitively – expensive.

These conditions are the most recent cause for alarm in a crisis for snow sports that has been increasingly reported upon over the last decade, most recently in last year's Slippery Slopes report (published in the run-up to the Beijing 2022 Winter Games), in which three-time Winter Olympian Lesley McKenna describes that the lack of natural snow means:

Everything then becomes more exclusive and more resource-heavy. Opportunities become harder to come by and less accessible.

The fewer ski resorts there are capable of producing the best conditions for training, the fewer kids there are that have the chance of reaching the top level, with the costs of travelling to training and competitions increasing as the weather and snow become less stable.²⁶⁵

The detrimental climate impacts sport is already experiencing are the thin end of a wedge that is only going to grow over the coming years. Disruption to play, harmful health impacts and reduced participation in sport present a dangerous cocktail that the sector must wake up to and seek to mitigate.

Leadership and responsibility: the power of sport to model low carbon living (and not the opposite)

Sport has a lot to lose as a result of climate change, but it also has an enormous and potentially unparalleled opportunity to create and inspire change.

As Dame Katherine Grainger (five-time Olympic medallist and Chair of UK Sport) comments, 'Sport is about challenge

and the determination to stretch ourselves to our limits. And now sport itself is facing a challenge'. ²⁶⁶

The call to action is clear, echoed by Patricia Espinosa, Executive Secretary of the UNFCCC, when she acknowledges that 'Sport is a \$600bn global business with a unique power to convene, move and inspire.'267

Sport has two key opportunities to show leadership:

1. Putting sport's own house in order

The reduction of the sport sector's sizable carbon footprint is an environmental imperative.

Direct emissions from operations, team and fan travel and the staging events means that sport has a significant destructive impact on the environment. Estimates suggest that sport's annual global emissions could be around 350 million tCO₂e – potentially the equivalent of a country the size of Spain or Poland.²⁶⁸ In 2022, the Qatar World Cup alone declared a footprint of 3.6 million tonnes – though experts believe the true footprint sits at over 10 million tonnes, with climate scientist Mike Berners-Lee noting that the event looked to be 'the highest carbon event of any kind apart from a war that humans have ever staged'.²⁶⁹

2. Beyond the goal posts of Scope 1 to 3

In addition to reducing its own sizable footprint, sport holds a golden card. Climate change necessitates a global transition in behaviours and systems and it's here that sport's global reach 'as one of the greatest convenors of people in our society'²⁷⁰ is of enormous value.

Game Changer, Op. cit..

²⁶⁷ Ibid.; see Research and Markets, 2022, Sports Global Market Report 2022 https://www.researchandmarkets.com/reports/5550013/sports-global-market-report-2022-by-type

²⁶⁸ D. Goldblatt, 2020, *Op. cit.*

BBC, November 23, 2022, World Cup 2022: Will Qatar tournament be carbon neutral?

https://www.bbc.co.uk/sport/av/football/63723039?utm_source=substack&utm_medium=email; Carbon Market Watch, May 2022, Yellow card for 2022 FIFA World Cup's carbon neutrality claim

https://carbonmarketwatch.org/wp-content/uploads/2022/05/Poor-tackling-yellow-card-for-2022-FIFA-1.pdf

Deloitte, Sports Business Group, April 2021, A sporting chance; The role of sport in mitigating climate change

The number of fans that sport enjoys is unparalleled, with Olympic Games attracting audiences of up to 3.6 billion people,²⁷¹ sports like football and cricket enjoying global followings of 3.5 and 2.5 billion people respectively, and a single cricket match between India and Pakistan in 2015 being watched by a billion people.²⁷² But, in addition to raw numbers of fans, as consultancy firm Deloitte points out, many of the qualities that are integral to sport's DNA also equip it to be a powerful player in the face of climate change:

Climate change is a global problem that requires the whole of society to collaborate and coordinate to find solutions.

Similarly, sport necessitates collaboration between its participants, whether teams or individual athletes, and more broadly collaboration is paramount in the organisation of sport locally, regionally, and globally. Sport is therefore a prime example of successful global collaboration that can be leveraged to address urgent societal issues.²⁷³

Football has received particular attention for its capacity to engage fans, with a 2022 study recognising that '[w]hen we combine all the various fans engaged in protests and collective action, football fans are one of the largest social movement populations in the world', and that this engagement is increasingly being applied to issues outside football itself (including, for example, local flood clean-ups, LGBT+ support and demonstrations of solidarity towards the war in Ukraine).²⁷⁴

The idea of sport's capacity to influence its environmental impact can go beyond its own operations is outlined in the

https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/sports-business-group/deloitte-uk-sbg-the-role-of-sport-in-mitigating-climate-change.pdf

Sweat Not Oil, Op. cit.; see Sponsorship Intelligence, December 2012, London 2012 Olympic Games Global Broadcast Report https://stillmed.olympic.org/Documents/IOC_Marketing/Broadcasting/London_2012_Global_%20Broadcast_Report.pdf

Sweat Not Oil, 26; see The Guardian, February 15, 2015, Cricket World Cup: India v Pakistan watched by a billion people – in pictures https://www.theguardian.com/sport/gallery/2015/feb/15/cricket-world-cup-india-v-pakistan-watched-by-a-billion-people-in-pictures

²⁷³ Deloitte Sports Business Group, April 2021, *Op. cit.*

J. Amann and M. Doidge, 2022, 'Football as an island of hope in a warming sea of despair', in J Cherrington and J Black (eds) Sport and Physical Activity in Catastrophic Environments. London: Routledge, pp.161–174, 167

'Scope F' White Paper released by Planet League in August 2022.

Here, Planet League draws on a concept termed 'Scope X' to describe the opportunity an organisation has to influence behaviour and emissions outside its own carbon footprint. Lucy Shea of communications agency Futerra says, 'Scope X is about recognising that brain print is as important as footprint' (italics added), so that organisations account for the impact of their advertising and advocacy as much as for the concrete emissions of their operations.²⁷⁵

For sports teams, this means recognising the potential influence they have on the other stakeholders in the sector, including governing bodies, athletes, suppliers, sponsors and partners. In particular, Planet League explain that they coined 'Scope F' as a way to bring to light the opportunity sports clubs have create change through how they engage their fan groups in day-to-day behaviour change:

Big brands can reach hundreds of millions or billions of people through their marketing. And their marketing influences how people live. That influence can make a big difference to our carbon emissions, depending on what the brands encourage us to do.

There is a special case where a brand does not have consumers, but has passionate fans.²⁷⁶

The Scope F report identifies that a football club engaging its fan base in making changes within their own lives can dwarf the changes they might make as an organisation – potentially, for some of the biggest football clubs, by one hundred times over.²⁷⁷ Of course this might appear to shift responsibility onto fans and needs to be done in careful, effective ways. Conversely, this also highlights the current

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Business Green, September 28, 2022, Scope X emissions: Futerra CEO urges firms to address climate impact of advertising and lobbying https://www.businessgreen.com/news/4057152/scope-emissions-futerra-ceo-urges-firms-address-climate-impact-advertising-lobbying

Planet League, August 2022, Scope F
https://staticl.squarespace.com/static/62c2cb2ad0a89b345c8a6d40/t/62e80b79e5a150329712f9b7/1659374468648/Scope+F+-+Maximising+sport%E2%80%99s+positive+impact+on+carbon+emissions.pdf

²⁷⁷ *Ibid*.

damage done by clubs who allow sponsorship and advertising that promotes high carbon products and lifestyles, as the advertiser comes with the implicit endorsement of the fans' loved football club.

Sport's clean appeal to dirty sponsors

This jackpot – the opportunity to reach billions of people through a sector that has high social cachet – has resulted in significant interest from brands keen to clean up their image through sports sponsorship and brand alignment. In an era where brands are faced with higher consumer expectations, but also higher levels of consumer cynicism, it is unsurprising that many are turning to sport to shore up their social credibility.²⁷⁸ As the *Sport Not Oil* report set out in 2021:

More than anything, partnerships between corporations and sports create a 'cultural licence to operate'. In other words, it grants companies a certain sense of credibility and normality in society, simply by having them associate their name with established sports teams and events.²⁷⁹

The commercial benefits of "sportswashing" are confirmed in studies demonstrating that sport sponsorship creates a positive link between the sponsor brand and the fan's sports team, and that 'consumer purchases are positively influenced by the belief that a company's brand is involved in sports sponsorship'. Moreover, the strong links sport has to health, teamwork and wellbeing mean that for high-polluting

Havas Group's 'Meaningful Brands 2021' report found that 73% of surveyed consumers believe brands should act for the good of society and the planet, but 71% don't believe brands deliver on their promises; Havas Group, 2021, Meaningful Brands 2021

https://www.meaningful-brands.com/Meaningful_Brands_2021.pdf

²⁷⁹ Sweat Not Oil, Op. cit.

Sweat Not Oil Op. cit.; see K. Mason, 2005, How Corporate Sport Sponsorship Impacts Consumer Behavior
https://www.researchgate.net/publication/237227040_How_Corporate_Sport_Sponsorship_Impacts_Consumer_Behavior; N. Pope and K. Voges, 2000, The Impact of Sport Sponsorship Activities, Corporate Image and Prior Use on Consumer Purchase Intention
https://www.researchgate.net/profile/Kevin_Voges/publication/29454754_The_impact_of_sport_sponsorship_activities_Corporate_image_and_prior_use_on_a_consumer_purchase_Intent/links/5432f1540cf22395f29e01c7/The-impact-of-sport-sponsorship-activities-Corporate-image-and-prior-use-on-a-consumer-purchase_Intent.pdf

industries sport is particularly attractive as a way of cleaning up their brand and airbrushing out the social, health and environmental harms their products create.

Pursuing a coherent and comprehensive sustainability policy

Reducing the direct emissions generated by sports teams is a critical part of sport's responsibility in the face of climate change. But focussing only on its own footprint, without also maximising the impact of its brain print, would present an incomplete and incoherent response to the climate crisis, displaying at best a naivety concerning sport's trump card, and at worst an apathy towards the damage done by high-polluters.

The steadily increasing implementation of climate strategies and net zero pledges by sports over the last five has mirrored a wide adoption across other sectors. Science-based targets have been becoming a business-norm since the Paris COP15 Summit, with the number of companies setting and committing to set targets doubling in 2021 to cover over a third of global market capitalisation.²⁸¹ Nearly 300 sports organisations are signatories to the UNFCCC's Sport for Climate Action Framework, including the International Olympic Committee, FIFA, BBC Sport, Sky Sports, Formula 1 and international sports federations.²⁸² numerous signatories have committed to reducing their emissions by 50% by 2030 and reaching net zero by 2040 - though few sports show sufficient ambition towards meeting these targets. After all, a pledge is just a pledge – what's needed is action and delivery.

While some may sign-up to frameworks, their actions can be sharply contradictory. FIFA, for example, after awarding the World Cup to fossil fuel superpower Qatar and partnering with oil and gas giant Qatar Energy, plans to significantly increase the size of the competition, inevitably increasing its environmental impact as more fans (and teams) fly to

Science Based Targets Initiative Annual Progress Report, June 2022, Scaling Urgent Corporate Climate Action Worldwide https://sciencebasedtargets.org/resources/files/SBTiProgressReport2021.pdf

For complete list see UNFCCC, Participants in the Sports for Climate Action Framework

https://unfccc.int/climate-action/sectoral-engagement/sports-for-climate-action/participants-in-the-sports-for-climate-action-framework

games.²⁸³ FIFA has also considered increasing the frequency of the World Cup. Then there is the planned introduction of a new competition, the Club World Cup in 2023, with FIFA already being criticised for awarding it to another oil state, Saudi Arabia,²⁸⁴ as well as being criticised for promoting Saudi Arabia in relation to the Women's World Cup.²⁸⁵

In order to avoid the worst climate scenarios, sports will need to rapidly undertake a more proactive approach to emissions reduction. However, properly utilising the platform sport provides brands and businesses is an essential and often overlooked area of opportunity for sports.

This is already referenced within the the remit of responsible consumption detailed under Principle 4 of the UN Sports for Climate Action Framework, to 'Promote sustainable and responsible consumption', which sets out that 'Communication campaigns toward fans and other stakeholders could be built, to promote the use of greener, sustainable options.'286

If sports wish to have a coherent and truly impactful approach to sustainability, it is not enough for them to reduce their own emissions. Any progress made through emissions reduction alone risks being erased by accepting sponsorship from high-polluters, granting social licence to those companies that are profiteering from harming people and planet. Instead, sports must shift away 'business-as-usual' endorsement of high-polluting sponsors, committing to clean up their sponsorship portfolios and thus their "brain prints" in tandem to the cleaning up of their carbon footprints. Going beyond these considerations, and demonstrated in 2022 by elite winter sports athletes challenging their governing bodies to redesign competition schedules to minimise the need for long distance travel, there

BBC, December 16, 2022, World Cup 2022: Fifa to reconsider format of 2026
World Cup after 'best ever' tournament
https://www.bbc.co.uk/sport/football/63998821

Amnesty International, February 14, 2023, Saudi Arabia: FIFA's award of the World Cup to Saudi Arabia is blatant sports washing https://www.amnesty.org/en/latest/news/2023/02/saudi-arabia-fifas-award-of-the-world-cup-to-saudi-arabia-is-blatant-sports-washing/

The Guardian, February 1, 2023, Saudi Arabia tourism body's sponsorship of 2023 Women's World Cup condemned by human rights groups https://www.theguardian.com/football/2023/feb/01/saudi-arabia-tourism-bodys-sponsorship-of-2023-womens-world-cup-condemned-by-human-rights-groups

Sweat Not Oil, Op. cit.; see UNFCCC, Sports for Climate Action Framework https://unfccc.int/sites/default/files/resource/Sports_for_Climate_Action_ Declaration_and_Framework.pdf

is the opportunity for sports to redesign its structures and systems to minimise climate impacts.²⁸⁷

Reputation and risk management: regulatory changes, new advertising codes, the rise of litigation against polluters, public opinion shifts

Allowing sport to be used as an advertising billboard for high-polluting companies flies in the face of the sustainability credentials sports are increasingly keen to develop. But, beyond incongruence, such an approach leaves sports vulnerable to reputational damage and loss of public approval.

Greenwashing is under increasing scrutiny in both courts of law and courts of public opinion, with the growing level of impatience articulated by the UN's Secretary General in his comment last September that "The world is in a race against time. We cannot afford slow movers, fake movers or any form of greenwashing". Building on this, a recent report on behaviour change from the House of Lords actively recommended that the government should regulate advertising content for high-carbon and environmentally-damaging products and services. 289

If sports wish to declare a position of climate leadership, they will need to develop confidence that the profiles of their sponsors and partners are compatible with those claims, as well as the future habitability of the environment that all sport depends upon. Worse still, sport does not want to be the remaining laggard as other industries, cities, and even whole countries actively ban high-carbon sponsorship and advertising.

Protect Our Winters, February 2023, Open letter to the FIS https://protectourwinters.eu/wp-content/uploads/2023/02/open-letter-to-FIS-230209.pdf

United Nations, April 27, 2022, We cannot afford greenwashing'; Guterres highlights key role of Net-Zero experts https://news.un.org/en/story/2022/04/1117062

²⁸⁹ UK House of Lords Environment and Climate Change Committee, October 2022, In our hands: behaviour change for climate and environmental goals https://committees.parliament.uk/publications/30146/documents/174873/default/

Falling foul of advertising codes

In the UK at least, it is already the case that codes of practice for advertising state:

Advertising must not encourage behaviour grossly prejudicial to the protection of the environment.

CAP Code 30:7²⁹⁰

It is reasonable to assume that adverts and sponsorships for car makers with the scale of fossil fuel emissions and other environmental impacts that Toyota and BMW have should easily fall into this category. Complaints that rely even on current, weak, advertising codes and regulations are becoming increasingly common as patience is lost with companies that overstate their green credentials.

Scrutiny of greenwashing is rising, with a recent review of climate litigation making specific reference to at least 27 greenwashing complaints 'filed before non-judicial oversight bodies in the UK, Australia, Italy, New Zealand, Denmark, the US and South Korea since 2008'.²⁹¹ October 2022 saw a significant victory for those seeking transparency around green claims, when HSBC Bank was found by the UK Advertising Standards Authority to have breached the sector's regulations by omitting material information regarding its fossil fuel financing, in its 'sustainability'-themed adverts.²⁹²

The Committee of Advertising Practice, February 2023, *The environment: misleading claims and social responsibility in advertising* (nb, there is an almost identical BCAP code that covers broadcasting)

https://www.asa.org.uk/static/d819e399-3cf9-44ea-942b82d5ecd6dff3/a79e0147-5417-4f7c-9fdce878078a7ffe/CAP-guidance-on-misleading-environmental-claims-and-social-responsibility.pdf

The Climate Social Science Network, January 2022, Climate-Washing Litigation:
Legal Liability for Misleading Climate Communications
https://cssn.org/wp-content/uploads/2022/01/CSSN-Research-Report-2022-1Climate-Washing-Litigation-Legal-Liability-for-Misleading-Climate-Communications.pdf

Financial Times, October 21, 2022, A rare victory in the war on corporate eco-guff
https://www.ft.com/content/a587402d-3292-4525-a8fa-7856c9a7eceb?acces
sToken=zwAAAYXVFmfZkdOlh0AtMpJFJdOo-nhWyafs6w.MEOCIEWtAtPGjjTla5eiu
N-MtLMNGy5l1-eLkSkJlfatadT9AiAOeVjwOvlUNzChwgBXb4bXsqRrh-yygu6v2VNiw
ePrKg&segmentId=e95a9ae7-622c-6235-5f87-5le4l2b47e97&shareType=enter
prise

Whilst sports sponsorship often escapes the scope of advertising regulations, this seems unlikely to continue given the increased attention greenwashing is receiving. In October 2022 the UK the House of Lords Environment and Climate Change Committee released recommendations focussed on increasing the stringency of regulations applied to the advertising of high-polluting products.²⁹³ In January 2023 the Competition and Markets Authority (CMA) also launched an investigation into how consumer protection legislation can be engaged to call out misleading environmental claims.²⁹⁴ This crackdown is also reflected at the highest level of international diplomacy, with the UN publishing a new set of standards in November 2022 to improve the transparency and integrity of the corporate sector's environmental claims.²⁹⁵

As the Qatar World Cup kicked off in November 2022, FIFA was faced with advertising complaints lodged with five advertising standards authorities across Europe. These complaints challenged FIFA's carbon neutrality claims which were branded 'deeply misleading and incredibly dangerous'.

296 In December 2022 the Swiss advertising commission opened proceedings against FIFA.²⁹⁷

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https://committees.parliament.uk/publications/30146/documents/174873/default/

²⁹³ PR Week, October 14, 2022, House of Lords Calls for new approach to environmental advertising https://www.prweek.com/article/1802186/house-lords-calls-new-approach-environmental-advertising; see House of Lords Environment and Climate Change Committee, October 12, 2022, In our hands: behaviour change for climate and environmental goals

Competition and Markets Authority, January 26, 2023, Misleading environmental claims https://www.gov.uk/government/collections/misleading-environmental-claims

The Economist, November 10, 2022, The UN takes on corporate greenwashing https://www.economist.com/business/2022/11/10/the-un-takes-on-corporate-greenwashing?utm_medium=cpc.adword.pd&utm_source=google&ppccampaignID=17551784836&ppcadID=137626460306&ppcgcIID=Cj0KCOiAz9ieBhCIARIsACB00GI9V_B6JTAFsvh63Oglek02U0BW6M3Z7KNvcIIcwBZWM1PwxrZahyYaAhufEALw_wcB&gcIid=Cj0KCQiAz9ieBhCIARIsACB00GI9V_B6JTAFsvh63Oglek02U0BW6M3Z7KNvcIIcwBZWM1PwxrZahyYaAhufEALw_wcB&gcIsrc=aw.ds

BBC, November 2, 2022, Qatar World Cup: Fifa's carbon neutrality claim 'misleading and incredibly dangerous https://www.bbc.co.uk/sport/football/63466168

Swiss Info, December 25, 2022, Swiss advertising commission opens proceedings against FIFA https://www.swissinfo.ch/eng/politics/swiss-advertising-commission-opens-proceedings-against-fifa/48160590

The rising risk of litigation for polluters

Of even greater concern to high-polluting industries (and something that should raise alarm bells for current or potential sporting partners) is the ever-growing stream of climate-based litigation.

For some time, the London School of Economics has tracked climate litigation globally, charting a clear increase over that time in the number of cases brought. Globally, over the last decade the total number of climate-related cases has more than doubled.²⁹⁸

In their most recent report charting climate change litigation from May 2021 to May 2022, LSE tracks cases brought against governments, carbon majors (the largest fossil fuel companies), and – increasingly – corporations, including in the transport sector. The report observes that 'Climate change litigation is now being filed against a more diverse range of corporate actors'²⁹⁹ so that whilst 16 of the 38 corporate defendants were fossil fuel companies, 'more than half were filed against defendants in other sectors', with four cases filed against the transport sector in 2021.³⁰⁰

For example, in 2021, German environmental organisation Deutsche Umwelthilfe (DUH) brought a case against Mercedes-Benz and BMW.³⁰¹ In the ongoing case, DUH argues that in failing to irreversibly commit to phasing out non-electric cars, BMW and Mercedes-Benz are violating the rights of future generations, corroborating their arguments with reference to the commitments of the Paris Agreement and IPCC reports.³⁰² A lawsuit has also been filed against Volkswagen on similar grounds.

The authors of the LSE report suggest that the increase in climate litigation that goes beyond fossil fuel companies as defendants might stem from litigants increasing focus on the

LSE, June 2022, Global trends in climate litigation: 2022 snapshot https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2022/08/Global-trends-in-climate-change-litigation-2022-snapshot.pdf

²⁹⁹ Ibid

³⁰⁰ Ibid.; LSE, May 2022, Taking companies to court over climate change: who is being targeted? https://www.lse.ac.uk/granthaminstitute/news/taking-companies-to-court-over-climate-change-who-is-being-targeted/

Pinsent Masons, November 16, 2022, BMW climate lawsuit gets first hearing in Germany
https://www.pinsentmasons.com/out-law/news/verhandlungsauftakt-in-der-klimaklage-gegen-bmw

³⁰² LSE, June 2022, Op. cit.

sources of emissions in their own lives (e.g. from food and agriculture, transport, plastics and finance):

Litigants increasingly appear to draw a connection between ongoing public debates about the contribution that individuals' consumer and lifestyle choices can make to reducing emissions and widespread concern that industry misinformation and inaction may prevent such choices from making a real difference.³⁰³

This trend will be of detriment to the image of high-polluting industries – and those sports who have tied their brands to them.

As well as climate litigation brought on the grounds of the environmental harm, climate-washing and green-washing litigation is 'gaining pace',³⁰⁴ with 'at least 20 judicial climate-washing cases [...] filed before courts in the US, Australia, France and the Netherlands since 2016'.³⁰⁵ These cases include the numerous claims that are currently being brought in the UK against German car manufacturers in respect of allegedly flawed guidance about the emissions performance of their diesel engines.³⁰⁶

Looking ahead, future trends in climate litigation could increasingly seek to pin personal responsibility on board directors (e.g. *ClientEarth v Board of Directors of Shell* [2022]), with growing momentum behind an international crime of ecocide which would bring criminal responsibility to bear on those individuals responsible for environmental destruction.³⁰⁷ The bringing of criminal responsibility to bear on these actions would only escalate the damage to reputation faced by partner organisations.

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303 Ibid.
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304 Ibid

The Climate Social Science Network, January 2022, Op. cit.

³⁰⁶ Sir Julian Flaux, November 16, 2022, Is commercial litigation going green?
Environmental and greenwashing claims and how they will shape the law
https://www.judiciary.uk/wp-content/uploads/2022/11/Combar-Lecture-2022.pg
df

³⁰⁷ LSE, June 2022, *Op. cit*.

Damage to reputation caused by reliance on high carbon sponsors – and even risk of litigation in turn by association – is an outcome playfully envisaged by barrister David Renton in a piece published the summer of the London Olympics. There, he pictures Seb Coe (Chairman of the London Organising Committee) being cross-questioned in court on the grounds that BP was promoted as the Games' 'Sustainability Partner' despite widespread knowledge of environmental disasters like the Deepwater Horizon catastrophe in 2010 and their involvement in the mining of the Canadian Tar Sands.³⁰⁸ Whilst this is currently unlikely to feature on sports risk agendas, the scale of the looming climate crisis makes it difficult to draw parameters around who will be beyond the grasp of future litigation.

The louder this drum beat sounds, the worse the publicity for recent or current partners and those who've accepted sponsorship from high-polluting companies. In partnering with these companies, sports brands are pawning their good name for sponsorship – but at what longer-term cost?

Shifting public opinion

Sports organisations who fall on the wrong side of climate action by aligning with high-polluting sponsors increasingly risk alienating their fan groups.

As individuals and organisations across society increasingly recognise the tremendous challenge of climate change and want to commit to action, the more they will look to engage with organisations and individuals who share similar values. As fans 'go green', so must the sports that they follow.³⁰⁹

A 2019 study found that 74% of football fans either agreed or strongly agreed that they cared about the sustainable impacts of their favourite football club, and 86% of fans thought that football should take care of environmental protection in the same way it takes care of other issues such

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D Renton, July 2012, The trial of Lord Coe: As imagined by David Renton https://www.scienceopen.com/hosted-document?doi=10.13169/socialistlawyer.61.0034

³⁰⁹ Deloitte Sports Business Group, Op. cit.

as discrimination.³¹⁰ Specific to car sponsorship, countries like Scotland are already seeing a shift in public attitude to road transport, with a national survey identifying that 79% of the Scottish public strongly support reduced car-use (provided there is sufficient public transport available).³¹¹ Amsterdam and France have already banned fossil fuel advertising, and in early activists mounted a Europe-wide campaign,³¹² with over 400 commercial billboards "hacked" with spoof ads targeting Toyota and BMW over their marketing greenwash. The action, covered by international media, called for a ban on the advertising of private cars.³¹³

The threat of bad publicity generated by an allegiance with high-polluting sponsors was seen to influence Paris mayor Anne Hidalgo in 2019 when she prevented TotalEnergies from sponsoring the 2024 Olympics, reflecting that 'it would be very difficult for our fellow citizens to identify with companies whose activity would have a big impact on the environment, based in particular on the massive use of carbon-based energies.'³¹⁴

This growing pivot away from energy giants is echoed in the ending of several long-standing fossil-fuel sponsorship deals in the UK after significant public criticism. In December 2022 the National Portrait Gallery's 30 year partnership with BP was brought to an end when they decided not to extend their contract.³¹⁵ This followed the Scottish National Portrait Gallery and Scottish Ballet Company ditching the fossil-fuel giant earlier in 2022,³¹⁶ and Royal Shakespeare Company's decision

³¹⁰ Ibid.; see BBC Sport, November 13, 2019, How green are Premier League clubs? https://www.bbc.co.uk/sport/football/50317760

Climate Outreach, October 2022, Developing an evidence-based toolkit for car reduction https://climateoutreach.org/download/28895/?tmstv=1675264603

The Driven, January 30, 2023, Toyota faces disaster unless new CEO performs miracle pivot to electric vehicles https://thedriven.io/2023/01/30/toyota-faces-disaster-unless-new-ceo-perfor ms-miracle-pivot-to-electric-vehicles/; The Driven, January 17, 2023, Activists target Toyota and BMW in billboard campaign, call for fossil car ad ban https://thedriven.io/2023/01/17/activists-target-toyota-and-bmw-in-billboard-campaign-call-for-fossil-car-ad-ban/

Euronews, 16 January, 2023, Toyota and BMW: Activists hijack billboards to highlight 'misleading adverts' from car companies https://www.euronews.com/green/2023/01/16/toyota-and-bmw-activists-hijack-billboards-to-highlight-misleading-adverts-from-car-compan

Sweat Not Oil, Op. cit.; see France 24, June 5th 2019, Total pull sponsorship plug on 2024 Olympics over 'eco-Games' https://www.france24.com/en/20190605-total-pull-sponsorship-plug-2024-olympics-over-eco-games

National Portrait Gallery, February 2022, *Update 2022* https://www.npg.org.uk/whatson/bp-portrait-award-2020/update/

³¹⁶ BBC, February 23, 2022, Scottish Ballet ends sponsorship deal with BP https://www.bbc.co.uk/news/uk-scotland-60497294

in 2019 to sever its partnership with BP part-way through its contract. Their reflection that the decision was particularly driven in recognition of the views of young people should be a particular clarion cry to the sports sector, given the latter's need to secure long-term viability through building appeal and engagement from younger fans:

Amidst the climate emergency, which we recognise, young people are now saying clearly to us that the BP sponsorship is putting a barrier between them and their wish to engage with the RSC. We cannot ignore that message.³¹⁷

We're seeing the risk of aligning with high-carbon emitters increasingly born out in the response from fans and players to decisions from sports bodies that fall short of expectations. When British Cycling announced Shell as their sponsor it sparked a wave of membership cancellations and an open letter with nearly 2,000 signatures calling for them to rethink the "irreconcilable conflict of interest" that the deal presented. Similarly, in the face of FIFA's duplicitous carbon-neutral claims a series of players from across Europe added their names to a public letter addressed to FIFA calling out the lack of integrity shown by the federation and calling for it to scrap their carbon neutral claims because 'players, fans and the planet deserve better'. Signatures and signatures are series of players from across Europe added their names to a public letter addressed to FIFA calling out the lack of integrity shown by the federation and calling for it to scrap their carbon neutral claims because 'players, fans and the planet deserve better'.

Sports taking on high-carbon sponsors may also increasingly face resistance from their athletes – many of whom have a larger social following and fan-base than the sports organisations themselves. Most recently, Cricket Australia saw their all-star captain Pat Cummins refuse to feature in any ad campaigns for their sponsor Alinta Energy.³²⁰ This was

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Royal Shakespeare Company, 2019, We are to conclude our partnership with BP https://www.rsc.org.uk/news/archive/we-are-to-conclude-our-partnership-with-bp

New Weather Institute, 2022, British Cycling: Tell Shell "On Yer Bike! https://actionnetwork.org/petitions/british-cycling-tell-shell-on-yer-bike/; BBC, October 11, 2022, British Cycling: Open letter calling for end to Shell deal receives more than 700 signatures https://www.bbc.co.uk/sport/cycling/63218485?at_medium=RSS&at_campaig_n=KARANGA

Re: Football community concerns over World Cup carbon neutrality claims, https://fossilfreefootball.com/wp-content/uploads/2022/11/FIFA-letter.pdf

The Guardian, October 18, 2022, Pat Cummins says he will not appear in any more ads for Cricket Australia energy company sponsor

followed by cricket's international players' union voicing its support for players who opt out of a sponsor engagement at T20 World Cup, whose player-of-the-match awards are sponsored by Saudi Arabian state-owned oil company Aramco.³²¹ Former Wallabies captain, now Australian Senator David Pocock met the news of Cummins' step with the tweet 'Fossil fuel companies are no different to tobacco. They no longer have a place sponsoring the teams and athletes we know & love.'³²²



When it was possible to make cars smaller, more efficient and less polluting, car makers accelerated in the opposite direction making bigger, heavier ones.

https://www.theguardian.com/sport/2022/oct/18/pat-cummins-says-he-will-not-appear-in-any-more-ads-for-cricket-australia-energy-company-sponsor

SBS News, October 20, 2022, Athletes are speaking up against fossil fuel sponsorship. Why now?

https://www.sbs.com.au/news/article/athletes-are-speaking-up-against-fossil-fuel-sponsorship-why-now/y45u47hal

D. Pocock, October 18, 2022

https://twitter.com/DavidPocock/status/1582476060699947009?ref_src=twsrc%

5Etfw%7Ctwcamp%5Etweetembed%7Ctwterm%5E1582476060699947009%7Ctwg
r%5E43d354ea925cb0d626125296335a7b17ad218e47%7Ctwcon%5Es1_&ref_url=
https%3A%2F%2Fwww.sbs.com.au%2Fnews%2Farticle%2Fathletes-are-speaking-up-against-fossil-fuel-sponsorship-why-now%2Fv45u47hal

5. Recommendations

Sports authorities, events and clubs are guilty of dangerous driving when they allow themselves to be used for self promotion by major polluters like Toyota and BMW. In the midst of the intertwined crises of climate, nature and health, it's vital that the world of sport comes clean on its dirty sponsors, and stops letting itself be used as an advertisina billboard for companies that are complicit in doping our atmosphere with carbon. We are not naive to the shock such a move would create: it would throw up financial, legal and cultural challenges that the world of sport would have to carefully navigate. But sport has been here before when it was heavily addicted to tobacco sponsorship, and yet managed to break the habit. To successfully end the reign of high-carbon sponsors in the sport, a much broader conversation must take place about how sport is funded and what responsibility sport's governing bodies have to their athletes and fans around the world to ensure the future survival of sport and the environment it relies upon.

As the section above makes clear, sport is uniquely well placed to stimulate ambitious climate action around the world, taking athletes, amateurs, and adoring fans on the journey with them. Sport speaks a universal language that crosses social, cultural and physical borders. The power of sport has been harnessed countless times before to bring communities together and overcome adversity – now's the time for it to be used to tackle the climate crisis. The values of sport – teamwork, sacrifice, collective joy, and creating an enduring legacy for future generations – are the exact ones that need to be leveraged to adequately address the climate crisis in a rapid and just manner.

Other, more detailed recommendations for actions by individuals, teams and governing bodies in sport can be found in the following two Badvertising reports, and a joint report with the Rapid Transition Alliance:

- Sweat not Oil: why sports should drop advertising and sponsorship from high-carbon polluters
- <u>The Snow Thieves How High–Carbon Sponsors are</u> <u>Melting Winter Sports</u>

• Playing against the Clock: Global sport, the climate emergency and the case for rapid change

This report has shown that the car makers Toyota and BMW are neither friends of adequate climate and environmental action, nor the long term well being of sport. Some sports apply a 'fit and proper' test to the potential owners of clubs. We believe that Toyota and BMW fail an environmental 'fit and proper' test to be sponsors of sport, and that such relationships should be ended.

Two further, strong concluding recommendations for systemic action flow logically and, we think reasonably, from the analysis in this report. Firstly, that sport overall should separate from sponsors and advertisers who are major polluters and represent an obstacle to necessary climate action. Such relationships are like sports injecting steroids into global heating, while simultaneously nailing the lid on its own coffin and blowing smoke in the faces of its athletes. Secondly, sport should only allow sponsorship and advertising from companies with a scientifically credible plan to align with the internationally agreed target of limiting global heating to 1.5°C. Therefore we recommend that:

- 1. It is time to drive high-carbon sponsors and partners out of sport: ending the option for high-carbon companies to use sport as a billboard to promote polluting products and lifestyles will send a strong message that sport is as serious about the climate emergency as it it about its own future and the health and wellbeing of its athletes and fans. At a time when humanity urgently needs to reduce global emissions, sport should sever its ties with those companies that are disproportionately responsible for pushing humanity closer to the climate cliff edge.
- 2. Sport should align its commercial partnerships with those companies and organisations that are actively building a world in which sport can thrive: Sport must think ahead and plan for many seasons to come, that means aligning its commercial practices and sponsorship deals with its own long term survival. Only companies that are implementing a scientifically credible plan aligned to the 1.5°C climate target are compatible with a world in which the future of sport is not threatened. This is not solely about the climate impact of high-carbon sponsors, but health issues

such as air pollution which every year are a matter of life and death for millions including those who play and enjoy watching sport.

Summary: Why sport should drop and avoid major polluters

- 1. The impacts of high polluters on sport are becoming steadily impossible to ignore, including climate change-induced disruption to play, health impacts from extreme heat and air pollution, and the risk of reduced participation.
 - a. Sports need to act urgently to reduce their own footprint and remove their allegiance with the brands doing most harm to the planet
- 2. Sport has an unparalleled opportunity to make a difference to the current climate trajectory we're on both by reducing its own footprint, and using its brain print to increase low carbon living
 - a. Sports often enjoy audience sizes in the millions or billions
 - b. The qualities in sports DNA (collaboration, courage, ambition) and its social cachet equip it to be a powerful player in the face of climate change - but also make it appealing to high polluting sponsors as a way to "sportswash" and airbrush the environmental and social harm they're doing
 - c. Sports engaging their fan bases to make changes in their own lives can dwarf the changes they might make as an organisation potentially, for some of the biggest football clubs, by one hundred times over.323 On the flipside, aligning with high polluting sponsors is likely to cancel out any individual carbon reduction sports organisations undertake
 - d. Doing one (footprint reduction) without the other (brain print maximisation) presents at best an incoherent approach – sports must shift away from 'business-as-usual' endorsement of high-polluting sponsors, committing to clean up their sponsorship portfolios and thus their "brain

³²³ *Ibid.*, 7

- prints" in tandem to the cleaning up of their carbon footprints.
- With the rise of scrutiny on corporate greenwashing, aligning with high polluting sponsors leaves sports vulnerable to reputational damage and loss of public approval.
 - a. Of greater concern to high-polluting industries (and something that should raise alarm bells for current or potential sporting partners) is the ever-growing stream of climate-based litigation

 globally, over the last decade the total number of climate-related cases has more than doubled.³²⁴
 - b. Sports organisations who fall on the wrong side of climate action by aligning with high-polluting sponsors increasingly risk alienating their fan groups.
 - c. The risk of aligning with high-carbon emitters increasingly is born out in the response from fans and players to decisions from sports bodies that fall short of expectations (e.g. British Cycling x Shell 2022³²⁵ and FIFA's carbon-neutral claims.
 - d. Sports taking on high-carbon sponsors also increasingly faces resistance from their athletes.

Joana Setzer and Catherine Higham, Global trends in climate litigation: 2022 snapshot, London School of Economics, June 2022 [https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2022/08/Global -trends-in-climate-change-litigation-2022-snapshot.pdf], 1

^{325 &#}x27;British Cycling: Tell Shell "On Yer Bike!"'
[https://actionnetwork.org/petitions/british-cycling-tell-shell-on-yer-bike/];
'British Cycling: Open letter calling for end to Shell deal receives more than 700 signatures', BBC, 11th October 2022
[https://www.bbc.co.uk/sport/cycling/63218485?at_medium=RSS&at_campaig n=KARANGA]

^{326 &#}x27;Re: Football community concerns over World Cup carbon neutrality claims' [https://fossilfreefootball.com/wp-content/uploads/2022/11/FIFA-letter.pdf]

ANNEX 1:

Methodology for calculating Toyota and BMW's climate impact

Calculating the lifetime emissions of ICE vehicles is fraught with difficulty due to a variety of factors:

- The different carbon intensities of vehicles across markets. For instance, the carbon intensity of vehicles in the EU is lower than in the USA due to factors such as regulation and manufacturing specifications.
- Calculating the lifespan of a vehicle is difficult because manufacturers tend to underestimate the lifetime mileage of their vehicles, while the lifespan changes according to the type of vehicle (small car vs. SUV), the engine size and its durability, and where it is being driven (EU vs. USA).
- The carbon intensity of vehicles is often vastly understated by manufacturers. According to analysis from Transport & Environment, the life-cycle emissions from BMW are 80.5% higher than reported and, for Toyota, actual emissions are 68.5% higher.³²⁷

In order to navigate these empirical challenges, we have used the average life-cycle emissions estimate from Transport & Environment of 68.2 tonnes $\rm CO_2e$ per vehicle. We have then used this to calculate the life-cycle emissions of the annual additions to the ICE vehicle fleet from BMW and Toyota using the annual sales figures.

BMW: In 2021, BMW sold 2,193,200 ICE vehicles (2,521,514 – 328,314 PHEV & BEVs).³²⁹ 68.2 tonnes of CO₂e x 2,193,200 = 149,576,240 tonnes of CO₂e.

Transport & Environment, (2022), 'Oil companies in disguise', https://www.transportenvironment.org/wp-content/uploads/2022/09/Carbon-ESG-finance-Car-Study-V6.pdf

³²⁸ *Ibid.*

³²⁹ Ibid.

• Toyota: In 2021, Toyota sold 10,383,548 ICE vehicles $(10,495,548-112,000 \text{ PHEVs \& BEVs}).^{330}$ 68.2 tonnes of $CO_2e \times 10,383,548 = 708,157,973.6 \text{ tonnes of } CO_2e.$

The carbon emission equivalents were calculated using the US' Environmental Protection Agency's 'Greenhouse Gas Equivalencies Calculator'. The methodology can be found on their website.

³³⁰ *Ibid*.

ANNEX 2:

Toyota and BMW's sponsorships

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	Toyota	BMW
Range of sports	American Football	American Football
	Athletics	Athletics
	Aussie Rules Football	Basketball
	Baseball	Biathlon
	Basketball	Chess
	Cricket	Cycling
	Cycling	Esports
	Esports	Football
	Football	Golf
	Futsal	Horse Racing
	Golf	Ice Hockey
	Handball	Luge
	Horse Racing	Mass Participation
	Ice Hockey	Motorsport
	Mass Participation	Multi-Sport
	Mixed Martial Art	Rowing
	Motorsport	Rugby Union
	Multi-Sport	Sailing
	Rugby League	Skeleton
	Rugby Union	Swimming
	Sailing	Tennis
	Skiing	
	Tennis	

	Toyota	BMW
Athlete Sponsorship	<u>Yes (many)</u>	"BMW Brand Ambassadors"
		eg Anna & Lisa Hahner (Running)
		Magdalena Neuner (Biathlon)
		Stefan Glowacz (Outdoor)
		Allessandro Zanardi (Motorsport/Long-distance triathlon)
		Jeff Wilson (Cricket, Rugby NZ)
		<u>Daniil Medvedev (Tennis)</u>
Club level sponsorship	Houston Rockets (Basketball, Stadium Naming Right)	Real Madrid (Soccer, Official Sponsor)
	Cadiz CF (Soccer, Official Partner)	AC Milan (Soccer, Official Sponsor)
	Adelaide Crows & Adelaide Crows Women (Aussie Rules Football, Principal Shirt Sponsor)	UD Almeria (Soccer, Official Sponsor)
	Alvark Tokyo (Basketball, Principal Shirt Sponsor)	Florida Panthers (Ice Hockey, Official Partner)
	Sacramento Kings (Basketball, Official Partner)	New Jersey Devils (Ice Hockey, Official Partner)
	Philadelphia 76ers (Basketball, Official Partner)	Los Angeles Chargers (American Football, Official Partner)
	Washington Capitals (Ice Hockey, Official Partner)	Orlando Magic (Basketball, Official Partner)
	Miami Dolphins (American Football, Official Partner)	
	KVC Westerlo (Soccer, Official Partner)	

	Toyota	BMW
Club level sponsorship (contd)	North Queensland Cowboys (Rugby League, Principal Shirt Sponsor)	
Federation Level Sponsorship	British Olympic Association (Multi-Sport, Official Sponsor)	Belgian National Soccer Team (Soccer, Official Partner)
	U.S. Ski & Snowboard (Skiing, Official Sponsor)	Golf Australia (Official Sponsor)
	South African National Rugby Team (Rugby Union, Official Partner)	
	Emirates Team New Zealand (Sailing, Official Sponsor)	
	Canadian Paralympic Committee + Canadian Olympic Association (Multi-Sport, Official Sponsor)	
	New Zealand Olympic Committee + Paralympics (Multi-Sport, Official Sponsor)	
	German Olympic Sports Confederation (Multi-Sport, Official Partner)	
	Paralympics Ireland (Multi-Sport, Official Sponsor)	
	Thai League I (Soccer, Competition Naming Right)	
	Australian Football League + Women's (Aussie Rules Football, Major Partner)	
	International Association of Athletics Federation (IAAF)	

	Toyota	BMW
Event sponsorships (all levels)	<u>Giro d'Italia (Cycling)</u>	PGA championship tournament
	<u>African Beach Games</u>	BMW International Open,
	SASAPD National Champs	IBU World Cup & IBU World Championship Biathlon
	Toyota Riga Cycling Marathon	Bavarian International Tennis Championship (Tennis, Competition Naming Right)
	Toyota Sports Festival	Illinois Open Championship (Golf, Competition Naming Right)
	IAAF World Championships	<u>Munich Marathon</u>
		BMW Berlin Marathon
		Americas Cup (Sailing)