

# Caught Offside with Offsets?

Why offsetting won't solve sports' climate problem





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### **Summary**

# Why offsetting won't solve sports' climate problem

Rising awareness of the climate emergency means many in the world of sport - clubs, events, fans - are turning to offsetting as a well-intentioned way to compensate for the impact of their emissions. This briefing explores why that may be a mistake, why offsetting in its current form does not do what its name implies, and why, under certain circumstances, it can even be damaging. The problem with offsetting is that:

- Offsetting doesn't work in its current form scientific evidence suggests that offsetting doesn't deliver on its promises.
- It can cause real harm both in terms of direct failure, but also in terms of the impact of offsetting projects on local communities, economies, and the natural world.
- It is a form of carbon laundering attempting to offset stable stores of fossil carbon with unstable stores like trees, which face multiple threats in our warming world, may mask the true climate impact.
- The system can be gamed through accounting tricks and murky carbon markets, offsets can be misallocated on a mass scale, which often means there is no reduction in overall emissions.
- It provides an excuse to continue polluting Offsetting can justify and legitimise the status quo, allowing organisations to continue polluting while claiming leadership and progress on sustainable and environmental issues.
- It inhibits real change the cost and convenience of offsetting means that the more challenging structural decisions required to address sport's climate impact may be delayed. As an approach, offsetting may restrict our thinking and ambition around how sport can drive climate solutions and as part of a thriving planet.



(Photo by <u>Braden Collum</u> on <u>Unsplash</u>)

The climate crisis demands ambitious action from sports organisations. As such, the policies, initiatives, and strategies introduced to respond to this crisis must be underpinned by robust evidence, no matter how well-intentioned they are. Unfortunately, in the case of offsets, the current evidence does not stack up. This poses vital questions over the credibility, longevity, and effectiveness of offsetting within sport and creates a window of opportunity to consider more immediate, practical, and potentially transformative ways of reducing the environmental impact of sport, and cutting emissions in line with what climate science says is required.

### **Sport and Climate**

Sport is in the middle of the climate emergency. Athletes, global sporting events, supporting infrastructure, and grassroots sport are all dependent on a healthy environment and acutely vulnerable to extreme heat, flooding and other climate impacts. But sport is also part of the problem, both as a vast source of carbon emissions and as an advertising billboard for high-carbon products, lifestyles and businesses.

Some of the largest polluters in the world - fossil fuel firms, gas-guzzling SUV manufacturers, and airlines - all use the power, reach and influence of sport to promote these goods and services in the midst of a climate emergency. A 2021 **Badvertising** report found a total of 258 sports sponsorship deals, in various countries and across 13 sports, with companies promoting high-carbon products, services and lifestyles. These companies use the soft power of sport to connect and communicate with billions because it is highly effective: research suggests that when polluters sponsor sport events, their brands become associated with the intense experiences of shared emotion.<sup>2</sup> Over time, fans and spectators come to associate logos and names with these unforgettable experiences and enduring emotions, which can often distract attention away from the environmentally and socially damaging everyday practices of these big polluters.

In searching for ways to reduce sport's environmental impact, many sports organisations choose to offset their emissions. Carbon 'offsetting' supposedly functions through paying for others to reduce or remove emissions to compensate for the emissions that organisations continue to release into the atmosphere. But, due to a mix of scientific and practical problems, offsetting does not do what it promises, often doesn't work at all, and can even make the problem worse.

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Badvertising, 2021, 'Sweat Not Oil: Why sports should drop advertising and sponsorship from high-carbon polluters', *Badvertising*, <a href="https://www.rapidtransition.org/resources/sweat-not-oil-why-sports-should-drop-advertising-and-sponsorship-from-high-carbon-polluters/">https://www.rapidtransition.org/resources/sweat-not-oil-why-sports-should-drop-advertising-and-sponsorship-from-high-carbon-polluters/</a>

Hill et al., 2021, 'The Roar of the Crowd: How Interaction Ritual Chains Create Social Atmospheres', Journal of Marketing, <a href="https://journals.sagepub.com/doi/abs/10.1177/00222429211023355">https://journals.sagepub.com/doi/abs/10.1177/00222429211023355</a>



(Photo by American Public Power Association on Unsplash)

Offsetting is a bit like trying to give up smoking by paying someone else to bake a cake. It fails to compare like for like. Using stable stores of fossil carbon from the geosphere will not be 'cancelled out' by planting a tree that may, or may not grow, whose lifespan is uncertain, and could fall victim to drought, flood, or blight. Baking a cake may be a good thing to do in itself, but it's unlikely to help you quit cigarettes. Similarly, planting a tree will not make up for the real, long-lived impacts of carbon emissions released into a saturated atmosphere now. Indeed, pretending that temporary forms of carbon removal can compensate for burning fossil fuels amounts to a kind of dubious 'carbon laundering'.

The theory goes that through offsets, organisations effectively 'erase' or 'cancel out' the emissions that arise from their ongoing activities, whether it's from transport, constructing stadiums, or powering facilities. Following this logic, organisations can purchase additional offsets to reduce their 'overall' impact, thereby making it possible to claim **absolute reductions in their emissions and environmental impact when, in reality, they have made no adjustments to their operations, procurement process, or organisational structures.** 

This theory, however, quickly dissolves in the face of the climate crisis. Under the latest climate models produced by the Intergovernmental Panel on Climate Change (IPCC), limiting global heating to 1.5°C requires global emissions to peak before 2025 and be cut by 43% by 2030, reaching net-zero in the early 2050s.<sup>3</sup> According to the IPCC, to achieve these temperature goals, global emissions need to fall by

<sup>&</sup>lt;sup>3</sup> IPCC, 2022, 'Climate Change 2022: Mitigation of Climate Change (AR6)', IPCC, https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC\_AR6\_WGIII\_Full\_Report.pdf

around 90%, while carbon removals will be relied upon to deliver the other 10% of required reductions.<sup>4</sup> Relying on carbon offsetting instead of pursuing **immediate**, **deep**, **and rapid emissions cuts at their source** is out of touch with the science and should not be promoted as a meaningful, credible, or permanent solution.

Of course, 10% is still a sizable chunk of global emissions and carbon removal in some form must be part of addressing climate change. But, offsetting emissions is no substitute to cutting them and these projects should **only be used as one tool in a comprehensive decarbonisation workshop**. Using offsets as the primary means of cutting emissions and claiming sustainable status is short-sighted, haphazardous, and potentially damaging: to reputations, to sport, to people, and to the planet.

The climate crisis demands ambitious action from sports organisations and their responses, however well-intentioned, must be underpinned by robust evidence. Unfortunately, in the case of offsets, the current evidence does not stack up.

This briefing summarises the main issues with offsets, explains why sport should not heavily rely on these projects to 'cancel out' its emissions, and why it is important that the power of sport is leveraged for achieving environmental excellence. In the briefing that follows this one, alternatives to offsetting in sport will be explored to provide practical guidance, potential solutions, and food for thought in key emissions hotspots within sport: energy, mobility, nutrition, textiles, and waste management.



(Photo by Markus Spiske on Unsplash)

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<sup>4</sup> Ibid.

### How do organisations offset?

Offsets are becoming a dominant method for sports organisations to cut emissions. They are not alone in this endeavour. Offsetting has become a central pillar of corporate sustainability strategies, net-zero pledges, and national governments' climate policy programmes too. Household names like EasyJet, Heathrow Airport, BP, and Shell all heavily rely on offsetting schemes to 'cancel out' their operational emissions, appear as environmentally friendly, and claim carbon neutrality.

Carbon offsets are big business and the global market is set to balloon in size as an ever-increasing number of organisations seek to claim carbon neutrality and reach net zero. According to analysts, the demand for carbon offsets will increase by a factor of 15 or more by 2030 and by a factor of up to 100 by 2050. By 2050, the global carbon market could increase to a value of \$200 billion. There are concerns that demand for offsets will outstrip supply by as early as 2024, putting immense pressures on land, communities, and wildlife.

Through offsetting projects and common but controversial emissions bookkeeping methods, known as 'market-based accounting', organisations can claim vast reductions in planet-warming emissions without transforming their operations, partnerships, or governance. To illustrate this point, look no further than Cisco Systems, one of the largest tech conglomerates in the world that employs nearly 80,000 people. In 2021, Cisco claimed triumphantly that they had cut their pollution across scope 1 & 2 (those emissions that are 'owned' or 'controlled' by the company) by 60% over the past 15 years.<sup>7</sup> But when these claims were assessed through a different accounting method, which excluded the offset and

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or-scaling-voluntary-carbon-markets-to-meet-the-climate-challenge

McKinsey & Co., 2021, 'A blueprint for scaling voluntary carbon markets to meet the climate challenge', McKinsey Sustainability, https://www.mckinsey.com/capabilities/sustainability/our-insights/a-blueprint-f

S&P Global, 2020, 'Global carbon offsets market could be worth \$200 billion by 2050: Berenberg', S&P Global, https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/natural-gas/051320-global-carbon-offsets-market-could-be-worth-200-bil-by-2050-berenberg

<sup>7</sup> Cisco, n.d, 'Climate Change and Scope 1 & 2 GHG Emissions', Cisco, https://www.cisco.com/c/m/en\_us/about/csr/esg-hub/environment/scope-1-2aha-emissions.html



(Photo by <u>Pedro Henrique Santos</u> on <u>Unsplash</u>)

renewable credits purchased by Cisco, the picture is entirely different: emissions climbed by 22%.<sup>8</sup>

There are a number of offsetting mechanisms that are particularly popular and will continue to dominate the global carbon offsetting market in the years ahead:

- 1. Nature-based offsets: This category of offsets uses plants, trees, forests, soil, or the ocean to remove carbon from the atmosphere and store it. Depending on the offset project in question, this approach can also protect and conserve ecosystems that are considered carbon sinks, such as rainforests and peat bogs. An emerging subset of this approach to offsetting is rewilding projects that seek to restore ecosystems and habitats to their former glory. These offsets seek to capture and store carbon emissions. In 2019, nature-based offsets made up over half (56.4%) of the voluntary offset market.<sup>9</sup>
- 2. Renewable energy offsets: This category of offsets seeks to maintain or increase renewable energy generation, ultimately displacing fossil fuel use and therefore preventing carbon emissions being emitted in the first place. These schemes are usually funded through the buying and selling of carbon credits

Bloomberg, 2022, 'What Really Happens When Emissions Vanish', Bloomberg, <a href="https://www.bloomberg.com/news/features/2022-11-01/intel-p-g-cisco-among-major-companies-exaggerating-climate-progress">https://www.bloomberg.com/news/features/2022-11-01/intel-p-g-cisco-among-major-companies-exaggerating-climate-progress</a>

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<sup>&</sup>lt;sup>9</sup> Ecosystem Marketplace, 2020, 'Voluntary Carbon and the Post-Pandemic Recovery', Ecosystem Marketplace Insights Briefing, <a href="https://wecprotects.org/wp-content/uploads/2020/11/EM-Voluntary-Carbon-and-post-Pandemic-Recovery-2020.pdf">https://wecprotects.org/wp-content/uploads/2020/11/EM-Voluntary-Carbon-and-post-Pandemic-Recovery-2020.pdf</a>

through accredited carbon markets. These offsets seek to **reduce carbon emissions by preventing emissions in the first place**. In 2019, renewable energy projects made up 21.3% of voluntary offset markets.<sup>10</sup>

There is momentum within these markets - and cash is being made - but huge questions remain over their credibility, transparency and integrity. Plenty of large organisations have, of course, made substantial climate gains in recent years. But when it comes to the complex and still developing world of offsets, some environmental claims need to be taken with a pinch of salt.

Even some of the more traditionally cautious organisations are sceptical of the role that offsetting can play in the years ahead. The International Energy Agency (IEA) stated in 2021 that "there is likely to be a limited supply of emissions credits consistent with net-zero emissions globally and the use of such credits could divert investment from options that enable direct emissions reductions."

In the race to decarbonise the global economy, there is a place for offsets. Yet to deliver of their promise of removing and storing carbon, every offset project must be:

- A genuine addition: as in, the carbon saving would not have happened without carbon credits.
- **Permanent:** carbon must be stored on a permanent basis to have 'offset' status.
- **Supported by local people:** far too many projects disrupt and damage surrounding communities, so ensuring and maintaining local support is key.
- Used only for residual emissions as a last resort:
  offsets must not be used to allow organisations to
  continue business-as-usual without transforming their
  internal operations.

If this sounds unviable, prohibitively expensive, or even impossible, take heart in the fact that some global industry accreditations and frameworks are already demanding these standards from corporations. The Net-Zero Standard from the Science Based Targets Initiative (SBTi) only allows measures that permanently remove carbon from the atmosphere to offset a corporation's remaining fossil fuel

<sup>10</sup> Ibid

<sup>&</sup>lt;sup>11</sup> IEA, 2021, 'Net Zero by 2050 - A Roadmap for the Global Energy Sector', *IEA*, <a href="https://iea.blob.core.windows.net/assets/beceb956-0dcf-4d73-89fe-1310e3046d">https://iea.blob.core.windows.net/assets/beceb956-0dcf-4d73-89fe-1310e3046d</a> 68/NetZeroby2050-ARoadmapfortheGlobalEnergySector CORR.pdf



(Photo by Mario Klassen on Unsplash)

emissions. And, even then, these permanent offsets are only accepted alongside deep emissions reductions from business operations.<sup>12</sup> Who would sign up to such a scheme? Only some of the biggest and most profitable businesses in the world.

There's no reason why sport can't match this level of ambition and action when it comes to reducing emissions. The reach, power, and legacy of sport means it can - and should - aim for real leadership in terms of sustainability and limiting global heating to ensure that athletes, fans, and sport as a whole can all thrive in a warmer world

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SBTI, n.d, 'Corporate Net-Zero Standard', https://sciencebasedtargets.org/resources/files/Net-Zero-Standard.pdf

# Caught offside with offsets: the Men's FIFA World Cup in Qatar

The Men's FIFA World Cup (FWC) in Qatar was promoted as the first "fully carbon neutral FIFA World Cup tournament". Such a claim, made before the tournament had even begun, could only be made through questionable carbon accounting tricks and extensive use of offsets - both of which have been called out over their credibility, transparency, and integrity. 14

## Here's how the FWC in Qatar was caught offside with offsets:

- The FWC in Qatar claimed it would offset emissions by providing fans and players with recommendations on how they could reduce their carbon footprint in their everyday lives. For instance, advising fans to cycle more and switch to a green energy provider.
- Travelling fans were invited to voluntarily offset the emissions from their flights, despite this being an ineffective mechanism with very few individuals choosing to voluntarily offset, and flight offset schemes being notoriously ineffective.<sup>15</sup>
- The FWC claimed to offset emissions by purchasing carbon credits via a new carbon market standard set up specifically for the Qatar World Cup, the Global Carbon Council (GCC), which will support 'additional' renewable energy projects in the region that displace fossil fuel generation. It is highly likely that many of these projects will be built anyway, meaning that the purchasing of carbon credits will do little to reduce net emissions.

<sup>&</sup>lt;sup>13</sup> FIFA, n.d., 'Sustainability', <a href="https://www.fifa.com/social-impact/sustainability">https://www.fifa.com/social-impact/sustainability</a>

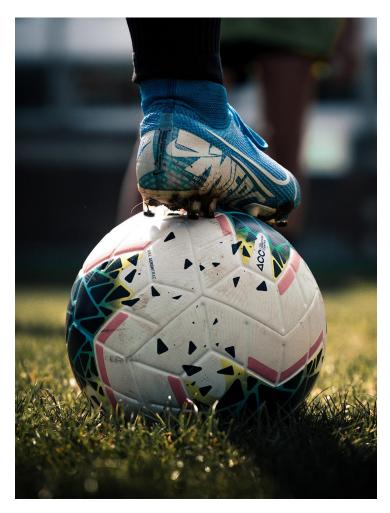
Carbon Market Watch, 2022, 'Yellow card for 2022 FIFA World Cup's carbon neutrality claim', CMW,

https://carbonmarketwatch.org/publications/poor-tackling-yellow-card-for-202 2-fifa-world-cups-carbon-neutrality-claim/

Faith, S., 2022, 'View: Carbon offsets may ease your flight guilt, but they aren't saving the planet', EuroNews Travel, https://www.euronews.com/travel/2022/06/02/view-carbon-offsets-may-ease-your-flight-guilt-but-they-aren-t-saving-the-planet

 The FWC created a tree and turf nursery in the desert to capture carbon, produce trees for stadium exteriors, and grass for the pitches and training grounds. There are concerns over the long-term storage of these emissions as it is unlikely the nursery will be operating for centuries to come.

The World Cup's carbon-neutral claim, made off the back of dodgy offsets, is pure greenwash: where spectators, fans, and players are being misled over the true environmental impact of the tournament.<sup>16</sup>



(Photo by <u>Connor Coyne</u> on <u>Unsplash</u>)

BBC, 2022, 'Qatar World Cup: Fifa's carbon neutrality claim 'misleading and incredibly dangerous', BBC

# What's the problem with carbon offsets?

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The simple answer to this question is that the vast majority of offsets do not work: organisationally, socially, or scientifically. However, the importance of this issue – and the need to get it right – requires further explanation and constructive engagement.

### What does the science say?

When climate scientists talk about planet-warming emissions, they have a simple phrase: "carbon is forever". Tonce in the atmosphere, carbon emissions (CO<sub>2</sub>) stays there for a very long time. Scientists believe that it will take close to half a million years for a tonne of CO<sub>2</sub> emissions released today through the burning of fossil fuels to be removed from the atmosphere naturally. This hard scientific truth runs right to the heart of the offsetting predicament: to effectively undo emissions, offsetting mechanisms must remain in place for hundreds of thousands of years. The average contract for a tree planting offset scheme, however, is around 40-years. Carbon emissions removed from the atmosphere are only temporarily stored in trees, vegetation, and soil.

It is very difficult to prove that an offset project is a genuine addition. To be so, the offset project in question must result in emissions reductions that would have not occurred if that project did not go ahead. Take a forest conservation project, for example. Here, the project's potential to reduce and store carbon emissions is based on the fact that the landowner will not cut the trees down. This scenario is usually modelled against a baseline scenario where the landowner rapidly and aggressively cuts down their trees to harvest timber, which is

Inman, M., 2008, 'Carbon is forever', Nature Climate Change, https://doi.org/10.1038/climate.2008.122

Archer, D., 2008, 'The Long Thaw: How Humans Are Changing the Next 100,000 Years of Earth's Climate', (2008), *Princeton Univ. Press*; Hausfather, Z., 2022, 'The big idea: stopping climate change isn't enough – we need to reverse it', *The Guardian*, https://www.theguardian.com/books/2022/nov/14/the-big-idea-we-need-to-reverse-climate-change-not-just-stop-it

Hausfather, Z., 2022, 'Let's Not Pretend Planting Trees Is a Permanent Climate Solution', New York Times, https://www.nytimes.com/2022/06/04/opinion/environment/climate-change-trees-carbon-removal.html

often an unrealistic scenario.<sup>20</sup> There are countless examples worldwide of carbon credits being issued to polluting organisations from forests or ecosystems that have never faced any existential threat.<sup>21</sup>

Likewise, criticism of "additionality" has been levied at renewable energy offsets. One issue with this type of offset is that the potential emissions reduction depends on a hypothetical situation: the project's **potential to offset emissions depends on them displacing fossil fuel generation that would have been built in their absence**. If the offset project would not have been viable without carbon credits, then it can be considered as addition and therefore valid.

Yet it is very difficult to prove that renewable projects would not have been built anyway. Research from Berkeley, Oxford, and Carbon Plan found that up to 85% of offsets sold today are not additional, which means **the sale of these credits has no impact on reducing emissions**. Given current sky-high prices of fossil fuels, and the declining costs of wind and solar energy, which over the last ten years have fallen by 55% and 85% respectively, renewable energy projects get the green light because they are the most affordable way to generate electricity.<sup>22</sup>

If renewable energy projects are built regardless of carbon offsetting credits, the current offset system is not working. There is evidence of huge misallocations of additionality offsets within the United Nations' Clean Development Mechanism (CDM), the largest offsetting programme in the world. By analysing the carbon credits allocated to 1,350 wind farms across India, researchers found that at least 52% or approved carbon credits were allocated to projects that would have been built anyway. The researchers conclude that "in addition to wasting scarce resources, we estimate that the sale of these offsets to regulate polluters has substantially increased global carbon dioxide emissions." 23

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Bloomberg, 2020, 'These Trees Are Not What They Seem, How the Nature Conservancy, the world's biggest environmental group, became a dealer of meaningless carbon offsets', Bloomberg, <a href="https://www.bloomberg.com/features/2020-nature-conservancy-carbon-offsets-trees/">https://www.bloomberg.com/features/2020-nature-conservancy-carbon-offsets-trees/</a>

Stay Grounded, 2021, 'Common Destination - Reframe, Rethink, Reshape', Stay Grounded & New Weather Institute, https://reframeaviation.stay-grounded.org/

<sup>&</sup>lt;sup>22</sup> IPCC, 2022, 'Climate Change 2022: Mitigation of Climate Change - Summary for Policymakers', IPCC, <a href="https://report.ipcc.ch/ar6wg3/pdf/IPCC">https://report.ipcc.ch/ar6wg3/pdf/IPCC</a> AR6 WGIII SummaryForPolicymakers.

Calel et al., 2021, 'Do Carbon Offsets Offset Carbon?', CESifo Working Papers, <a href="https://www.lse.ac.uk/granthaminstitute/publication/do-carbon-offsets-offset-carbon/">https://www.lse.ac.uk/granthaminstitute/publication/do-carbon-offsets-offset-carbon/</a>

Scientifically there is the crucial issue of false equivalence between sources of emissions, where they are released, and the capacity of natural systems to capture and store them. For instance, the climate impact of air travel extends far beyond the quantity of carbon emitted over a journey. Due to where the carbon is emitted, high up in the troposphere, alongside water vapour and other greenhouse gases, air travel's contribution to warming the planet (known as its radiative forcing) is far greater than the same quantity of carbon released by a car.<sup>24</sup> What's more, assuming that emissions from air travel are captured like-for-like by a nature-based offset project is misguided.

This is not to say that nature-based or renewable energy projects are useless. On the contrary, finding effective ways to enhance natural carbon sinks by protecting forests and planting new ones must be a central part of humanity's efforts to address climate change. The same is true for scaling up renewable energy to displace fossil fuels. But selling such projects as 'offsets' will only deflect from meaningful action to cut emissions, and legitimise and justify ongoing pollution from organisations that can – and should – be leading the way on climate.

# What does the climate and natural world say?

We are in the midst of a climate crisis. The impacts of this crisis are becoming clearer every day with droughts, floods, and wildfires becoming a constant in headlines and across social media timelines. The climate crisis is now communicating itself. Until emissions are brought to zero, the planet will continue to warm and climate impacts will become more frequent and severe.<sup>25</sup> To cut emissions at the pace necessary to prevent some of the most catastrophic impacts, **absolute reductions in emissions are needed**.

Our warming world is already undermining ecosystems and biodiversity, but when you add impacts like floods and droughts, the longevity of offsetting schemes is brought into question. Trees may be cut down by humans, they may be destroyed during a wildfire, or they may succumb to beetle

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<sup>&</sup>lt;sup>24</sup> Stay Grounded, 2021, 'Common Destination - Reframe, Rethink, Reshape', Stay Grounded & New Weather Institute, <a href="https://reframeaviation.stay-grounded.org/">https://reframeaviation.stay-grounded.org/</a>

<sup>25</sup> IPCC, 2022, 'Climate Change 2022: Mitigation of Climate Change - Summary for Policymakers', IPCC, https://report.ipcc.ch/ar6wg3/pdf/IPCC\_AR6\_WGIII\_SummaryForPolicymakers.



(Photo by Marcus Kauffman on Unsplash)

infestation or blight. All of these risks currently exist and will only intensify as our planet continues to warm.

### Natural carbon stores and sinks are already at breaking point:

- The Amazon rainforest, one of the largest carbon sinks on the planet, has been ravaged by deforestation, drought, wildfires and climate change.<sup>26</sup> Now, the Amazon rainforest is emitting more carbon dioxide than it is able to absorb, with potentially disastrous implications for humanity's efforts to curtail warming.<sup>27</sup>
- Tropical mangroves, which store more CO<sub>2</sub> than tropical rainforests, are one of the most threatened ecosystems on the planet.<sup>28</sup> These natural systems cannot adapt quick enough to

<sup>&</sup>lt;sup>26</sup> Gatti *et al.*, 2021, 'Amazonia as a carbon source linked to deforestation and climate change', Nature, https://www.nature.com/articles/s41586-021-03629-6

<sup>&</sup>lt;sup>27</sup> Ibid.

<sup>&</sup>lt;sup>28</sup> Donato *et al.*, 2011, 'Mangroves among the most carbon-rich forests in the tropics', Nature Geoscience, https://doi.org/10.1038/ngeo1123

the changing climate and rising sea-levels. By 2050, existing coastal mangroves could be entirely wiped out if sea-level rise continues at its current rate.<sup>29</sup>

Using land-based offsets alone to remove the world's carbon emissions in line with 'net zero' by 2050 would require at least 1.6 billion hectares of new forests, equivalent to five times the size of India.<sup>30</sup>

Over the last few years, giant corporate offsetting schemes have been ravaged by climate impacts. In 2021, as record-breaking wildfires engulfed California, Oregon, and Washington in the USA, forest offsets bought by Microsoft and fossil fuel major BP were destroyed.31 These occurrences are not rare. Since 2015, wildfires in California have damaged six forest offset buffer projects, releasing between 5.7 million and 6.8 million tonnes of carbon back into the atmosphere, according to CarbonPlan.<sup>32</sup> As buffer 'pools', these projects are set up as protected reserves to cover unforeseen losses across tradeable carbon offset projects. Yet, the authors conclude that due to climate impacts, the offset buffer in California is "unable to ensure that credited forest carbon remains out of the atmosphere for at least 100 years". 33

When such schemes burn down, or are destroyed by other means, the emissions they have apparently offset return to the atmosphere. If the company that paid for these offsets has made limited progress in reducing their operational emissions by the time the 'offset' carbon returns to the atmosphere, the result is a net-increase in emissions. In our increasingly unpredictable climate, the idea

33 Ibid.

<sup>&</sup>lt;sup>29</sup> Saintilan *et al.*, 2020, 'Thresholds of mangrove survival under rapid sea level rise', Science, https://www.science.org/doi/10.1126/science.aba2656

<sup>30</sup> Oxfam, 2021, 'Tightening the net: the implications of net zero climate targets for land and food equity', Oxfam, https://www.oxfam.org/en/research/tightening-net-implications-net-zero-climat e-targets-land-and-food-equity

Flynn, S., 2021, 'Carbon offset programs of companies like Microsoft, BP go up in smoke as wildfires decimate forests', Independent, https://www.independent.co.uk/climate-change/news/carbon-offsets-microsoft -bp-forests-wildfires-b1897012.html

<sup>&</sup>lt;sup>32</sup> Badgley et al., 2022, 'California's forest carbon offsets buffer pool is severely undercapitalized', Frontiers in Forests and Global https://doi.org/10.3389/ffgc.2022.930426

nature-based offsets provide permanent carbon removal does not hold up to the reality on the ground.

### How are local communities impacted by offsetting?

Due to the global reach of offset markets, there is a lot of demand for projects and schemes located where capturing and storing carbon is cheapest. More often than not, these schemes are located in the Global South within developing countries. As such, the vast majority of carbon credit buyers are located in the Global North, while the largest suppliers of offsets are in the Global South. The likes of Peru, Brazil, Kenya, Zimbabwe, Bolivia, Indonesia, and Cambodia are the dominant suppliers of offsets.<sup>34</sup>

Nature-based offsetting schemes, such as tree-planting initiatives and land use projects, are often described as a "win-win-win": these projects combat climate change, protect threatened ecosystems and biodiversity hotspots, while also offering economic and development opportunities to local communities. But this is often not the case.

There are multiple examples of nature-based offsetting schemes being implemented without regard to the legal or customary land use rights of local people.<sup>35</sup> These poor quality and shoddily implemented offset schemes have been shown to lead to human rights abuses, 36 adverse effects of biodiversity,<sup>37</sup> and are less likely to provide long-term stores of carbon emissions.<sup>38</sup> One common example is when native forests brimming with biodiversity are cut down to make way eucalyptus plantations, fast-growing monocultures, devoid of wildlife, that can pull groundwater away from local communities and disrupt agriculture.39

<sup>&</sup>lt;sup>34</sup> Ecosystem Marketplace, 2020, 'Voluntary Carbon and the Post-Pandemic Recovery', Ecosystem Marketplace Insights Briefing, https://wecprotects.org/wp-content/uploads/2020/11/EM-Voluntary-Carbon-and--Post-Pandemic-Recovery-2020.pdf

<sup>&</sup>lt;sup>35</sup> Cavanagh & Benjaminsen, 2014, 'Virtual nature, violent accumulation: The 'spectacular failure' of carbon offsetting at a Ugandan National Park', Geoforum, https://doi.org/10.1016/j.geoforum.2014.06.013

<sup>&</sup>lt;sup>36</sup> Barletti & Larson, 2017, 'Rights abuse allegations in the context of REDD+ readiness and implementation', Center for International Forestry Research, http://www.jstor.com/stable/resrep16247

Friggens et al., 2020, 'Tree planting in organic soils does not result in net carbon sequestration on decadal timescales', Global Change https://doi.org/10.1111/gcb.15229

<sup>&</sup>lt;sup>38</sup> Fa et al., 2019, 'Importance of Indigenous Peoples' lands for the conservation of Intact Forest Landscapes', Frontiers in Ecology and the Environment, https://doi.org/10.1002/fee.2148

<sup>39</sup> Stay Grounded, 2021, 'Common Destination - Reframe, Rethink, Reshape', Stay Grounded & New Weather Institute, https://reframeaviation.stay-grounded.org/

The climate justice implications of this approach are clear: while organisations in the Global North continue to pollute, the Global South is expected to capture and store their emissions. These countries and communities have made almost no contribution to global emissions, yet are expected to capture and store them. In Uganda, 22,500 people were forced from their homes to make way for the creation of a timber plantation to generate carbon offsets that were accredited by the UK's New Forests Company. 40 Another project in Uganda, initiated by a Norwegian company, planted pine and eucalyptus trees in a nature reserve.<sup>41</sup> Before this project started, the local community were allowed to use the land for livestock grazing, fishing, accessing water, and gathering firewood. However, once the offsetting project was established, the local community lost all these access rights, pushing many into food and water insecurity, as well as poverty.42

Dedicating vast amounts of land in the Global South to offsetting **shifts** the **responsibility** for cutting emissions away from the Global North, where the majority of pollution occurs, to the Global South. If these projects continue, it may inhibit other development aims, such as ending extreme hunger. By 2050, an overreliance on nature-based offsetting could drive food prices up by 80 percent due to restrictions on land use, devastating communities around the world.<sup>43</sup> Sport must be wary that it is not complicit in hurting communities and hindering development.

### Does the current offsetting system work?

The current system is vulnerable to being gamed - but not in a very sporting way. A series of scandals have rocked voluntary carbon markets, damaging the reputations of the companies that buy these offsets and the companies that sell them.

In the US in 2020, BlackRock, JP Morgan, and Disney all paid for carbon offsets via The Nature Conservancy, one of the largest environmental NGOs in the US. It was found that the

<sup>40</sup> Grainger & Geary, 2011, 'The New Forests Company and its Uganda plantations - 'I lost my land. It's like I'm not a human being', Oxfam, https://oi-files-d8-prod.s3.eu-west-2.amazonaws.com/s3fs-public/file\_attachments/cs-new-forest-company-uganda-plantations-220911-en\_4.pdf

<sup>&</sup>lt;sup>41</sup> Lyons, K., & Westoby, P., 2014, 'Carbon colonialism and the new land grab: Plantation forestry in Uganda and its livelihood impacts', *Journal of Rural Studies*, <a href="https://doi.org/10.1016/j.jrurstud.2014.06.002">https://doi.org/10.1016/j.jrurstud.2014.06.002</a>

<sup>42</sup> Ibid

Guardian, 2021, 'Reforestation hopes threaten global food security, Oxfam warns', The Guardian, https://www.theguardian.com/environment/2021/aug/03/reforestation-hopes-threaten-global-food-security-oxfam-warns

Nature Conservancy has been 'protecting' large swathes of land that is under no direct threat, and selling those carbon offsets to some of the largest corporations in the US. This led Danny Cullenward, a Stanford lecturer and policy director at CarbonPlan, to suggest that Nature Conservancy is "engaged in the business of creating fake carbon offsets".<sup>44</sup>

have Similar scandals occurred elsewhere. Massachusetts Audubon Society is a large environmental NGO that is a custodian of a vast wildlife reserve in east Massachusetts. In 2015, the organisation sought to take part in California's carbon markets by claiming that it could deforest and log 9,700 acres of its preserved forests over the next few years.<sup>45</sup> In exchange for not spoiling its forests, the Massachusetts Audubon Society was issued 600,000 carbon credits that it promptly sold through intermediaries to earn \$6 million.<sup>46</sup> The majority of these credits were sold to fossil fuel firms who claimed them as emissions reductions. The problem is that these carbon credits did not actually reduce emissions because the NGO is not a timber company, so it would never have cut its preserved forests down - the credits were issued for trees that were never at risk. Ultimately, this scheme - and others like it - actually result in a net increase in emissions.47

The combination of a system that can easily be gamed, with dodgy offsets being the cheapest way to reduce emissions on paper, has created what researchers call a "mitigation deterrence", which can deter or delay immediate action to cut emissions. Under a worst-case scenario, the promise of offsetting schemes and other carbon-removal approaches could lead to an additional 1.4°C of global heating.<sup>48</sup> This would be catastrophic for both sport and the planet.

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<u>nttps://www.bloomberg.com/reatures/2020-nature-conservancy-carbon-offsets-trees/?leadSource=uverify%20wall</u>

Bloomberg, 2020, 'These Trees Are Not What They Seem, How the Nature Conservancy, the world's biggest environmental group, became a dealer of meaningless carbon offsets', *Bloomberg*, <a href="https://www.bloomberg.com/features/2020-nature-conservancy-carbon-offsets">https://www.bloomberg.com/features/2020-nature-conservancy-carbon-offsets</a>

Technology Review, 2021, 'A nonprofit promised to preserve wildlife. Then it made millions claiming it could cut down trees', *Technology Review*, https://www.technologyreview.com/2021/05/10/1024751/carbon-credits-massachusetts-audubon-california-logging-co2-emissions-increase/

<sup>46</sup> Ibid.

<sup>47</sup> Ibid.

McLaren, D., 2020, 'Quantifying the Potential Scale of Mitigation Deterrence from Greenhouse Gas Removal Techniques', Lancaster Environment Centre, https://eprints.lancs.ac.uk/id/eprint/143814/1/quantifying MD\_AAM.pdf

### Don't get caught offside with offsets

Sport is waking up to the climate emergency both as a threat to itself and as something that it has a vital role to play in reversing. When urgent action is called for it is tempting to reach for the nearest, easily available apparent solution. That's why it is tempting to reach for offsets to undo the damage done by its own pollution that is contributing to the climate crisis. This briefing sets out why that approach is, at best, ineffective, and at worst counter-productive, potentially worsening the problem. This matters firstly because it means sport is in danger of relying on a false solution. But it also matters because sport is hugely influential with events like the football World Cup attracting audiences in the billions. As a highly visible role model, should sport adopt false solutions, the message sent can be hugely damaging, resulting in many others copying and making the same mistake.

Sport has the ability to unite and inspire billions around the world, transcending cultures and languages. But it is also deeply reliant on a healthy and habitable planet. This gives sport a unique responsibility to rapidly reduce its emissions, while ensuring that its sustainability strategies and initiatives do not damage the natural systems upon which sport depends.

Sports organisations are not alone in their use of offsetting, and they are well placed to catalyse a change in approach and provide real global leadership on climate. The climate crisis invites sport to rethink how it is organised globally and for minimising its climate impact to be a key criteria in everything it does. Sport, like everything else, needs to be compatible with globally agreed climate targets. Where it is not, it needs to stop and make adjustments, and fast.

In the next briefing in this series, we will unpack some of the practical alternatives to offsetting with a focus on the key emissions hotspots within sport: transport, energy, textiles and nutrition, and the design of competitions. In the meantime it is vital that sport does not fall for false solutions, and in the process lead others down a dangerous path where the life-threatening problems of carbon pollution remain unsolved.

### **Further reading**

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The fantasy of carbon offsetting | Environmental Politics

The inconvenient truth of carbon offsets | Nature

<u>Virtual nature, violent accumulation: The 'spectacular failure'</u> of carbon offsetting at a Ugandan National Park | ScienceDirect

<u>Greenpeace: Why carbon offsetting doesn't cut it l World</u> <u>Economic Forum</u>

Why Forest Carbon Offsets Aren't a Substitute for Slashing Emissions | NRDC

<u>Carbon offsetting flights. A dangerous distraction l</u> <u>Responsible Travel</u>

Bad deal for the planet. Why carbon offsets aren't working... and how to create a fair global climate accord | Eldis

"Nature cannot be fooled." Kevin Anderson on mitigation as if climate mattered | REDD-Monitor