



What's Stopping Us?

Applying psychology to accelerate climate action in sport



Global Climate Action
United Nations Climate Change



Centre for Climate Change
and Social Transformations

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Sport Positive supports the global sports community to increase ambition and action on climate change, sustainability, environmental justice and biodiversity. We work tirelessly to connect industry stakeholders globally, host an annual Summit, host a podcast, publish reports, research and share environmental sustainability data via our leagues. If the conversation is about sport and sustainability globally, we're usually not far away.

UNFCCC Sports for Climate Action Initiative aims to provide sports organizations with a forum where organizations can pursue climate action in a consistent and mutually supportive fashion by learning from each other, disseminating good practices, lessons learned, developing new tools, and collaborating on areas of mutual interest.

The Centre for Climate Change & Social Transformations (CAST) is a global hub for understanding the systemic and society-wide transformations that are required to address climate change. CAST researches and develops the social transformations needed to produce a low-carbon and sustainable society; at the core of CAST's work is a fundamental question of enormous social significance: How can we as a society live differently – and better – in ways that meet the urgent need for rapid and far-reaching emission reductions? Based at the University of Bath, additional core partners are the charity Climate Outreach, the University of Manchester, University of East Anglia and Cardiff University.

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Executive summary

People sit at the heart of every transformation needed within sport to move towards a healthier and more sustainable future.

Internally at sports organisations, attitudes and behaviours will have to change to systematically incorporate climate action into decision-making and priorities, and have a two-way dialogue with sportspeople, staff, fans, suppliers and sponsors on the topic. Insights from psychology such as understanding people's values, overcoming misperceptions about what other people think, and the importance of leadership and social norms can offer sports organisations a deeper understanding of how to create change.

Sports are having to change how and where activities and competitions take place and are feeling the effects of climate change on sportspeople's health and performance.^{1,2} In recent years, the FIS Para World Snowboard Championships in Spain have been postponed due to lack of snow, heatwaves have impacted cricket in India, and record rainfall flooded stadiums and training centres in Brazil. However, sport also contributes to climate change, increasing greenhouse gas emissions through training, competitions, equipment and facilities involving sportspeople themselves as well as wider organisations and fans.³ Sports are increasingly recognised as having a positive role to play in climate action both in reducing the sector's own emissions and the influence it can have on others.

Intended for decision-makers in sport, this report brings together existing climate change research from psychology and insights from interviews with sportspeople and organisations.

While there are barriers to action, there are also drivers for sports organisations and sportspeople to become climate leaders. Travel has a big climate impact, with multiple barriers to action including scheduling of sports events or training, location and availability of transport, and the impact on performance. The fear of hypocrisy is also a barrier to sportspeople speaking out, but education and support can help to overcome this. While there is mixed evidence about how experiencing extreme weather can impact climate action in general, some sports have a direct connection with their environment and are experiencing climate impacts which could be tapped into to create change. Commercial factors in sport can be both a barrier and an opportunity. Sport must distance itself from high-carbon industries and seek opportunities for sustainability partnerships. A sense of responsibility and authentic leadership, embedded across organisations, is key and can build trust.

Looking forward, there are many opportunities for sports organisations to (re)orientate their activities toward climate action. Besides reducing their emissions, they can act in various roles, as influencers, advocates, communities and hosts.

The report highlights synergies between women's sport and climate change, although more research and support is needed, and men's sport must catch up. Although it is incumbent on the sports industry to show leadership, effective policy and governance is needed to create a level playing field and accelerate change. We conclude with recommendations informed by the psychology of environmental behaviour change.



Introduction

Extreme weather is becoming more common and severe, with 2023 the warmest year on record globally.⁴ Climate impacts are also being acutely felt within sport, for example, heat risks to athletes at international sporting events and sports grounds flooded.⁵

Widespread and urgent action is needed to mitigate (reduce the causes) and adapt (adjust how people deal with the impacts) to climate change. While this undoubtedly includes technological solutions, profound societal and behaviour changes are also required (carbon footprints in rich countries must be cut by up to 95%), and people must be at the heart of effective climate action.^{6,7,8}

Sport, like all sectors, will need to take wide-reaching climate action, and will face barriers as well as opportunities to achieving this. **But sport also has a *unique* role to play in engaging people with climate change because of its influence in society and on behaviour.**

Firstly, we outline existing insights from the social and behavioural sciences, including key concepts that are helpful to understand how change may or may not occur. We then share insights from our interviews with sportspeople and organisations to bring to life barriers and drivers for climate action, as well as opportunities for sport leadership.

This report is designed to help people working in sports organisations understand key areas which can help and hinder climate engagement and action, from people's values and habits to social norms, leadership and organisational culture.



What do we already know?

Climate engagement and action can be explored at different levels, from individuals, through communities and organisations, to broader regional, national or international entities. These levels are inter-connected: behaviour change at the individual level cannot be achieved without wider societal change, while societal change requires action by key decision-

makers and collectives. Here, we summarise key insights from research on (a) climate engagement at the individual and community level, and (b) behaviour change within organisations. These areas align with how sports organisations can engage with people as consumers/fans and as staff/professionals, respectively.

Engaging individuals and communities with climate change

How to communicate about climate change is important as not everyone will engage with it in the same way. This may differ between countries.⁹ For example, ways of engaging about or framing the topic that resonate with people in different countries are using local values about nature appreciation (Czech Republic), linking climate change to economic development (India),¹⁰ talking about

climate change as part of a shared national journey (Egypt), and being guardians of the natural world (Mauritania).¹¹

People also have different values. These are underlying core beliefs or “guiding principles”¹² which go beyond demographic differences (such as age or gender) and can be helpful to understand commonalities and differences between people.

How to communicate about climate change is important as not everyone will engage with it in the same way.

For example, while common values across the British public are fairness (everyone being subject to the same environmental rules) and avoiding waste, certain segments of the population feel less pride than others about taking climate action.¹³ Research across Europe found that people’s values, political orientation, gender, age and education can all predict their climate change beliefs and level of concern about the issue.¹⁴

Emotions should be considered when thinking about climate action. Most people around the world are becoming increasingly worried about climate change and say that it is having an impact on their big life decisions.¹⁵ In the United Kingdom (UK), anxiety about climate change is on the rise, and has been shown to predict pro-environmental actions such as encouraging others to save energy and borrowing/renting items.¹⁶ Research from the United States (US) found that feelings of anxiety do not lead people to take climate action, but feelings of hope do.¹⁷

The values that people hold and how they think about climate change do not necessarily lead to action. This has long been known in research and is called the ‘value-action gap’

However, the values that people hold and how they think about climate change do not necessarily lead to action. This has long been known in research and is called the ‘value-action gap’.¹⁸ Providing information (e.g. through adverts) about climate change can be important in fostering support for climate policy but can be relatively ineffective in driving behaviour change.¹⁹ Upstream interventions—approaches that change the context in which consumers act and remove the barriers to behaviour change—are far more effective. This includes economic measures, regulations and standards, provision of physical infrastructure, and nudges – things that make climate action easier, cheaper, more attractive, and ideally the default. This is in line with behaviour change models, such as COM-B, which see behaviour (B) as an outcome of Capabilities (C; our physical and psychological skills and abilities), Opportunities (O; the social and physical context and available options), and Motivations (M; our habitual and conscious drives and attitudes).²⁰

How people relate to others is also a key consideration. Using trusted messengers—people who are seen as relatable, sincere, reliable and kind—to communicate about climate change in a way that is relevant to people’s lives can help to better connect with them.²¹ Celebrities, including elite athletes, are often both trusted messengers and able to reach wider audiences than experts on societal issues like climate change,²² but this can also be used negatively through ‘sportswashing’.²³

Social norms (what is perceived as being socially acceptable) also affects thoughts and behaviour as people want to feel like they belong and are part of a group.²⁴ Although difficult to achieve, changing social norms can have short-term impacts on climate action and may be easier to influence than people’s values.²⁵

Research across 125 countries has shown that while most people support climate action in principle, they *underestimate* how much other people are willing to act, which can be a barrier to action.²⁶ On average, 69% of people say they would give up 1% of their income to tackle climate change, but when asked how many of their fellow citizens would do the same, they estimated on average only 43% would.²⁷ People's misperceptions of what others are feeling and doing is known as 'pluralistic ignorance', and correcting this is critical to unlock social influence.

It is also important to correct misperceptions about what constitutes effective action (e.g. over-estimating the efficacy of low-impact actions, like recycling).^{28,29}

Effective climate communication also engenders a sense of agency or 'self-efficacy' (i.e., that one's action matters and change is possible)^{30,31} and highlights the various personal and social benefits of climate action (e.g. to health, finances).³²

But climate action is a shared responsibility, and the most effective way to achieve emissions reduction is through collective action, as communities and through encouraging government intervention. Sport encompasses some of the largest and most organised communities in society, presenting a transformative opportunity to harness their collective power and group identities for climate action.³³



Photo: An aerial view of a surfers mass peaceful protest, surfers floating on surfboards on the ocean, a protest against an offshore oil drilling application. CC BY-NC-ND 4.0. Lachlan Gardiner / Climate Visuals

Climate action within organisations

Research across various sectors shows that organisational culture, leadership support, and employee engagement are critical factors in driving climate action. Sports organisations, from grassroots clubs to professional teams, leagues, and associations, can apply these insights to enhance their own climate initiatives.

Employees are more likely to engage in climate action if they feel their organisation has strong environmental values,³⁴ and businesses which are proactive on climate find it easier to recruit and retain staff.³⁵ Support from colleagues and managers, including clearly showing that they value pro-environmental behaviour (e.g. making public commitments) and modelling this themselves, can provide leadership and social norm signals that encourage employees to act on climate change.^{36,37} Personal knowledge, as well as cultural and practical issues, can be barriers to action in organisations.³⁸

Research across various sectors shows that organisational culture, leadership support, and employee engagement are critical factors in driving climate action.

While social and institutional influences are key drivers of organisational change, physical factors (e.g. transit links, videoconference facilities) are too.³⁹ Consistent with behavioural models mentioned earlier (e.g. COM-B), various studies highlight that the most common barriers to workplace environmental behaviour change are more often structural than motivational (e.g., lack of recycling facilities).⁴⁰

Consistent with this, changing workplace behaviours is most effective where a combination of physical and social interventions is used.⁴¹ Energy use savings of up to 50% have been achieved through a range of measures that included: technological measures, like automation, providing supporting facilities, and social approaches, such as eco-champions.⁴²

Education can help change behaviour, where it creates new work cultures and motivates staff to act (as well as plugging knowledge gaps).⁴³ Social interventions, such as team-based feedback and eco-champions, can also influence workplace behaviours.⁴⁴

Workplace interventions are more effective when employees identify with and share the values of their employer, and perceive them to be committed to environmental action, since this motivates employees to support collective action.⁴⁵ In sport organisations and clubs, evidence also shows that environmental initiatives can shape members' environmental attitudes, including loyalty.^{46,47}

A key insight from research on workplace interventions is that they tend to be most effective when they are aligned with employees' (and employers') other goals and embedded in organisational decision-making. As with interventions with households, behaviour change is most likely when the new behaviour is easier (the path of least resistance) as well as more attractive than the old one. For example, this might entail climate action being included in promotion criteria, prioritising low-carbon suppliers on procurement lists, or making workplaces more comfortable as well as lower-carbon (e.g., via office retrofits).⁴⁸

Indeed, the most effective mitigation measures include supply chain procurement of low-carbon products and services and infrastructure improvements.⁴⁹

When trying to create behaviour change, interventions should be tailored to different groups, including consideration of people's values and identities.⁵⁰ Interventions should be co-designed with staff to ensure they consider possible barriers to action, focus on high-impact behaviours and provide consistent and positive messages.⁵¹ Trust is critical, with research showing that globally, businesses are less trusted to do what is right to address climate change than governmental and non-governmental organisations (NGOs).⁵² However, people trust scientists, experts and their peers to tell the truth about climate change,⁵³ and sports clubs can act as vital hubs for building social capital.⁵⁴

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Photo: Renovus Solar offers affordable solar solutions for everyone who pays an electric bill in upstate New York, including residential and commercial clients. CC BY 2.0. Stephen Yang / The Solutions Project

Barriers to action in sport and how to enable change

Barrier: Travel

Global travel has a big climate impact, with road transport accounting for most of its emissions and international aviation emissions increasing.⁵⁵ It is also profoundly unequal, with half of the emissions from commercial aviation coming from only 1% of the world's population.⁵⁶ While research in Britain shows that the sport sector has a big transport impact,⁵⁷ sport clubs and sportspeople could also have the power to affect behaviour change around travel.⁵⁸

Travel can be a barrier to climate action and this was spoken about by most of our interviewees, recognising the large impacts of travel in sports organisations. Some are making efforts to reduce unnecessary travel (e.g. coaching staff, UK football) or explained that there is a lack of clarity internally about addressing travel impacts (commercial staff, UK football). The time it takes to travel more sustainably was also seen as a barrier due to the scheduled timings of training or events, though available modes of transport also differed depending on finances within organisations. Changing scheduling of training and competitions to reduce flying was suggested, such as organising competitions in a similar area at the same time, as well as developing expertise in other countries which could reduce travel. The impact of travel on performance was also discussed.



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“There's a perception that it [climate action] conflicts with performance levels. [...] I disagree. I think you can perfectly happily travel by train and get somewhere and if it takes a couple more hours, I don't see a performance impact.”

Jamie Farndale, Ex Scottish Rugby Captain and General Manager Club Development and Sustainability at Hong Kong China Rugby Union

Yet different challenges around infrastructure and location need to be taken into consideration. For example, the lack of a good train network nearby is a challenge for people to access the Ashton Gate stadium in England (Sarah Farrar, Chief Commercial Officer, Bristol Sport) and travel is a challenging area to reduce emissions for Barbados-based sports teams. This can also include unique challenges in different sports, for example, support fleets for sailing.

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“When we live on an island, if we want to go somewhere else, unless it's virtual, it's a necessity to use an aeroplane [...] There's only so much that we can do in the grand scheme of things, but relative to what we do as an organisation, we'll try.”

Dr Sasha Sutherland, Director and Sustainability Lead, Barbados Olympic Association



Barrier: Hypocrisy

Another barrier to action is the fear of being perceived as hypocritical if sportspeople or organisations are still taking part in high-carbon activities. A survey of almost 400 elite winter sport athletes and coaches found that athletes' climate action tends to be low-risk (posting on social media, signing petitions and being part of letter-writing campaigns) and there are concerns about being seen as hypocritical.⁵⁹ Additionally, research on elite athletes' experiences of extreme heat found that pro-active education helped to increase their knowledge and empowered them to speak about climate change, for example through joining organisations or groups, doing their own research or taking part in formal education programmes.⁶⁰

This was reflected in our interviews. From an organisational point of view, a commercial staff member in UK football spoke about how there needs to be more encouragement towards clubs which are trying to do the right thing otherwise it can disincentivise action and lead to 'greenhushing'.

There are also varying types of engagement from an athlete point of view.

“Sometimes good intentions are poorly perceived. [...] Are we likely to receive lots of negative PR for even attempting to try and do the right thing? [...] Anything which is probably a greenwash or a sportswash is likely to have come into fruition purely because of the lack of education or understanding as to why that wasn't authentic.”

”

Commercial staff, UK football

For example, Lesley McKenna OLY (coach developer practitioner) spoke about how snow sports athletes' involvement can range from putting a sticker on their snowboard to taking direct action such as through Extinction Rebellion. Jamie Farndale also spoke about how training and support from Athletes of the World helped him to increase his climate change knowledge and provided reassurance to overcome concerns about hypocrisy.

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“I’m a sevens player, I fly around the world to different tournaments [...] but it’s [climate action] just such a positive thing to speak about. The fear of hypocrisy is much bigger than, actually, the kickback.”

**Jamie Farndale, Ex Scottish Rugby Captain and
General Manager Club Development and Sustainability
at Hong Kong China Rugby Union**



Driver: Direct impacts and connection with the environment

There is mixed evidence about extreme weather events and people’s engagement with climate change. For example, while the majority of people in The Bahamas anticipate worsening extreme weather, more than half say they do nothing to personally address climate change,⁶¹ and in the UK, experiencing extreme weather increased people’s belief in climate change but did not change their behaviour.⁶² However, engaging in discussions after extreme weather events could be used as a way to increase knowledge and action around climate change.⁶³

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“That relationship I have with the natural environment is a form of knowledge that gives me an expertise that I believe makes me credible to talk about this.”

**Lesley McKenna OLY,
Coach developer practitioner**

The connection that some sports might have with their environment can be powerful and impact whether they feel able to speak out about climate change: A potential driver for action in sport is experiencing the direct impacts of climate change, which was spoken about with interviewees from outdoor focused sports (climbing, winter sports).

Climate impacts were also spoken about in relation to sportspeople’s health, how events might be adapted to address this and how to use this to raise awareness with sport fans. Rocio Ruiz Berdejo (Responsable Marketing Secciones y Forever Green [Marketing department and responsible for Forever Green] at Real Betis Balompié) spoke about how issues with drought in the south of Spain led to a campaign from the club to raise fans’ awareness about the responsible use of water. Heat and air quality was also mentioned in some interviews, with heat being seen as a big safety issue for athletes and health being an initial prompt for climate action.

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“Being in the mountains, it's really obvious that climate change is happening in front of your eyes. [...] It's a real, visceral thing for me. It's not just something I've noticed, it's a living challenge. [...] It has huge, everyday lived and very real consequences in terms of risk management.”

Lesley McKenna OLY, coach developer practitioner

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“Glaciers are disappearing, [climbing] routes are falling down, more wildfires every summer are affecting access so we can't get to some of the crags. [...] It's having an impact on our sport already.”

**Dr Catherine Flitcroft,
Head of Access and Environment,
British Mountaineering Council**



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“In terms of adapting our event schedules [...] we started to do our Olympic Day celebrations at night. [...] We do the 5K at night and that's been fun for kids and for the adults. [...] So that's been good using the cooler parts of the day.”

Dr Sasha Sutherland, Director and Sustainability Lead, Barbados Olympic Association



Barrier and driver: Commercial factors

Commercial factors in sport can be both a barrier and an opportunity for change. Fossil fuel and high-carbon sponsorship in sport is a major issue and creates a barrier to action, with oil and gas companies currently spending \$5.6 billion on sport sponsorship, mainly in football, motor sports, rugby union and golf.⁶⁴

Unsustainable revenue streams in football clubs were recognised in our interview with a commercial staff member in UK football, who also spoke about how finding sustainable revenue streams can be challenging but that they need to be taking positive action themselves in order to attract sustainable partners. Hayley Ladd (Midfielder, Manchester United) also spoke about wanting to see tighter regulations for clubs from the governing bodies around sustainable partners and sponsorships but recognised that clubs will still want to have freedom to distinguish themselves from their competitors.

Existing research shows that commercial factors can conflict with climate aims,⁶⁵ and it can be challenging to find sustainable revenue streams. In our interview with a commercial staff member in UK football, understanding commercial aspects was seen as crucial for sustainability staff in football as it plays a vital role in the sport.

Other interviewees emphasised the opportunity to leverage sport's commercial side to accelerate climate goals, such as through strategic partnerships with sustainable sponsors and non-profit organisations.

Jamie Farndale (Ex Scottish Rugby Captain and General Manager Club Development and Sustainability at Hong Kong China Rugby Union) felt the full potential of sport for sustainability was yet to be realised and that financial support from governments or businesses is essential to use its influence for fan and community engagement. Sustainability being a commercial advantage and helping them to stand out was mentioned by a commercial staff member in UK football as well as the Chief Commercial Officer at Bristol Sport.

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“Bristol City doesn't have the same level of reach as a Premier League team or achieve the same levels of exposure which are key factors brands will look for when deciding a sponsorship partnership. However, we lead the way in sustainability across both our football and rugby teams and as a venue with Ashton Gate. And, with more and more brands wanting to be seen as acting positively to help affect climate change, we present a pathway to work collaboratively.”

Sarah Farrar, Chief Commercial Officer, Bristol Sport

As well as representing commercial advantage, sustainability can help to build a fan base. In the newly created Emirati International League T20, the Desert Vipers have sought to stand out from their competitors through their sustainability actions, becoming the first cricket franchise in the world to publish their carbon footprint, and host a ‘sustainability match’.

Driver: Sense of responsibility and leadership

Leadership on climate change can build trust as well as driving and legitimising change.⁶⁶ There are several considerations which can drive businesses to become more sustainable, including abiding by regulations, saving money, extreme weather events and awareness of climate change at a senior level.⁶⁷ Elite snow sport athletes and coaches from 20 countries think that international sports organisations have particular responsibility, influence and leadership on climate action within sport.⁶⁸ Sportspeople also think their governing bodies have a role in addressing climate change and research in Britain found that sports clubs tend to approach their governing bodies for advice.^{69,70}

In our interviews, responsibility for climate action was often officially held by one person in an organisation but many worked closely with, and had essential buy-in from, wider teams. Climate action (and sustainability more broadly) was often prioritised at a high level, with sustainability staff either being part of senior leadership themselves or having access to this. Organisations which had a wide reach across different teams, clubs or sports were also seen to have an important leadership role, using their influence to create action through both pressure and encouragement.

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“The leagues need to start having some more pressure and requirements on the teams cause that's how quicker action can be taken.”

Danielle Doza, Vice President of Sustainability and Environmental Services, Cleveland Cavaliers



This leadership can also be channelled through the sportspeople that organisations work with, but this needs to be done in a way that is authentic. In our interviews, this was questioned by Lesley McKenna OLY (coach developer practitioner) who felt it was important that climate action should be about “ethical behaviour and responsibility. It's not about identity and coolness”, and this is reflected in some research which shows that climate action within sports organisations can be driven by moral and ethical reasons.⁷¹



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“That sense of community, that sense of togetherness, that kind of culture, I think, is what makes what we're about to do easier to succeed in than had you just been an individual organisation on our own and I think the Barbados Olympic Association being the [...] guardians of the Olympic movement in Barbados gives us the influence, the authority, the scope, to welcome everyone else.”

Dr Sasha Sutherland, Director and Sustainability Lead, Barbados Olympic Association

A better understanding of sportspeople's engagement with climate change can also be improved within organisations. Tapping into the leadership roles that sportspeople already have was discussed by several interviewees. While one interviewee mentioned how some sportspeople are reluctant to be role models, others spoke about how their organisation supports them to act. For example, Bob Ramsak (Head of Sustainability, World Athletics) spoke about how they survey athletes to understand how they feel about climate change and broader environment issues and work with them so that they can share their concerns.

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“In terms of the elite sport, I think there is a real role for [climate] ambassadors.”

Dr Catherine Flitcroft, Head of Access and Environment, British Mountaineering Council

Sports organisations can also look to the music industry for how they are taking climate action, given similarities in working across organisations/venues, with high profile and grassroots music artists, and mobilising huge global fanbases. For example, using the cultural influence of events to create change on audience travel,⁷² how music artists can use their platform and influence, and understanding how the sector as a whole can lead on climate action.⁷³

“We want to use the power of football as a speaker because footballers are influencers. And for everyone, especially the new generations, they are role models.”

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Rocio Ruiz Berdejo, Responsible Marketing Secciones y Forever Green (Marketing department and responsible for Forever Green), Real Betis Balompié

Looking forward: opportunities for sport leadership

Using and recognising sport's multiple roles

Individuals have multiple roles in climate action as consumers, investors, citizens, role models and organisational participants.⁷⁴ Similarly, sports organisations play a variety of roles in both contributing to, and addressing, climate change. Here, we identify five distinct roles and opportunities for sports organisations to (re)orientate their activities for climate action.



1. As **emitters**, sports clubs, leagues and individual sportspeople have a responsibility to lead by example, reducing their direct emissions. Travel often represents their largest footprint, and the most urgent changes needed are to reduce the impact of long-distance travel, particularly from private jets. Whereas many elite sports raise concerns about player welfare when using ground transport, pro-cycling sets the example, using team coaches and other vehicles equipped with sleeping and

cooking facilities during tours. This is often preferred over hotels, because of the consistency that can be created for athletes. Besides travel, other opportunities include reducing emissions from stadiums. Oxford United's new stadium in England will not use fossil fuels, and the Johan Crujff Arena in Amsterdam generates electricity using solar panels and wind turbines.

2. Many sports organisations are also **hosts** of major events, and this role generates opportunities to influence fan behaviour. English football club Forest Green Rovers set the example here, removing all meat products from their stadium. Arsenal FC fans are given a reusable cup by default when buying drinks at its Emirates Stadium in London.

3. With a prominent role in the cultural landscape, sports organisations and sportspeople have a unique position to **advocate** for climate action. A recent proliferation of sustainability initiatives (including Sport Positive and UN Sports for Climate Action) makes it easier than ever for organisations to add their weight to the climate movement, and call for more action by the industry. Although the risk of being seen as hypocritical is a real barrier to many sportspeople speaking out on climate change, one approach is to directly acknowledge the challenge of reducing personal impacts as an elite athlete. In a short film called The Hypocrite, Amie Engerbretson, a professional skier, explores the tension associated with having a large carbon footprint while advocating for climate action. Another approach is to acknowledge the limits of individual agency and advocate for collective action.

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“Speaking out or challenging someone is always a little bit of a risky move. [...] It’s hard for one or two, three players to address. It needs to be addressed within the culture for everyone to be affected by it and consistently motivated by it.”

Hayley Ladd,
Midfielder, Manchester United

4. Sports organisations are **communities** themselves, with a unique ability to speak to and motivate collection action amongst their staff and supporters. This applies to both spectator communities and grassroots participants. The power of community has been demonstrated in response to flooding, with over £100,000 donated to AFC Wimbledon to help the club repair its flood-damaged pitch in 2024.

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“The action sports space - social capital, community spirit - [...] the culture is alive and changing all the time. In the corporate world, culture can be quite static and fixed [...] whereas in the living community, there’s far less of a hierarchy.”

**Lesley McKenna OLY, coach
developer practitioner**

Community culture varies between sports. Research with football fans found that climate change engagement needs to be aligned to the culture of football (“rivalries, competition and collective identity”) to be effective.⁷⁵ Pledgeball deliberately seeks to leverage fan rivalry for climate action, by asking supporters to make emissions reduction pledges, and then ranking football clubs based on their collective efforts. In SailGP’s Impact League, teams compete for a cash prize.

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“We're a competitive bunch, so how can we potentially work with and, in a positive way, compete with, other teams to be better?”

Danielle Doza,
Vice President of Sustainability
and Environmental Services,
Cleveland Cavaliers



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“We've really cottoned onto something here about getting the athletes' competitive spirit. [...] We just see that [the Impact League] as being something that other sports should try and pick up.”

Iona Neilson, Head of Climate
Action, SailGP



5. Lastly, the rise of social media has enabled many elite sportspeople to become powerful social **influencers**. Football stars such as Cristiano Ronaldo and Lionel Messi have some of the largest followings in the world. Research shows that people are more willing to take high-impact climate action if they see leaders doing the same,⁷⁶ but too few sportspeople are using their platform to promote climate action. There are some notable exceptions, however. Formula 1 driver Nico Rosberg uses his social media to raise awareness about climate change, while Australian cricket captain Pat Cummins launched *Cricket for Climate*.

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“Putting yourself out there on social media, TikTok, whatever it is, I think individual athletes are quite good at that because they need to promote themselves as a brand. Whereas as a player, you're part of a team. [...] If anyone did that five years ago, it would be like ‘what are you doing? Come on, just focus on the rugby. Be part of the team’.”

Jamie Farndale, Ex Scottish Rugby Captain and General Manager Club
Development and Sustainability at Hong Kong China Rugby Union



Women's sport and climate action

Climate impacts are perceived and experienced differently by women than men.⁷⁷ Globally, women are more likely to think about climate change regularly, have become more worried about it in the last year, and be less satisfied with their country's climate actions compared to men.⁷⁸ In the UK, women are more likely to support climate policies and could be influential in changing the behaviour of others.⁷⁹ There are also organisational impacts. Businesses in Europe and the US with more women at management level have lower carbon emissions,⁸⁰ and women entrepreneurs in Canada are more likely to prioritise sustainability.⁸¹

Women's sport is growing, both in terms of participation and spectatorship. There is an opportunity here to leverage this growth for climate goals. Research into fan travel behaviour at a Rapid Vienna football game in Austria found that more women car-shared than men.⁸²

Additionally, in North America, fans of women's sports are more likely to think that sports teams and athletes should

support social causes, more likely to have been inspired to take social action themselves, and think that women athletes are more inspirational and greater role models than men.⁸³ However, women's sport and climate change is an under-researched topic,⁸⁴ and more evidence is needed about the impact of women's sport, as men's sport has more funding and larger regional leagues.^{85,86} One role for climate advocates is to support women's sport by highlighting these discrepancies to put pressure on men's sport to act.

In our interviews, Hayley Ladd explained that at Manchester United, she felt there was less pressure on the women's team to take flights compared to the men's, meaning they could potentially be more sustainable and champion climate action more easily. Work led by Amy James-Turner from Tottenham Hotspur found that women footballers are concerned about climate change and want clubs to help players better understand how they can take climate action, though there were mixed opinions about flying.⁸⁷

Policy and governance to accelerate change

The sports industry has made significant progress in embracing sustainability, but it requires continued support and guidance from governmental bodies to fully realise its potential. Governance actors play a crucial role in shaping the landscape of sustainable sports through various mechanisms.

“

“The sector already is doing a lot of this stuff proactively and actually it's waking up to the need to change. But government has a role to support it in that.”

UK Government civil servant

Governance bodies can create **voluntary initiatives** for sports organisations to adopt, promoting best practices in sustainability, and sports regulators can establish a level playing field by setting clear rules and standards, including on sustainability monitoring and reporting. Governance bodies have the power to set standards for **advertising** in sports, particularly in distancing fossil fuel interests from sporting events and organisations as well as tackling sportswashing and greenwashing. Edinburgh City Council has banned fossil fuel advertising in the city, and the UN Secretary-General has expressed support for such moves.

Sport inherently aligns with many government objectives, offering significant **co-benefits**. For instance, promoting sports participation contributes to public health initiatives and builds social capital within communities. Recognising these synergies, governments can integrate sports more effectively into broader policy frameworks.

“

“I think there's a growing understanding that government are recognising the potential which sport has in this space [climate action] to really deliver across all of its other objectives.”

UK Government civil servant

Governments also have a substantial stake in **major sporting events**, often providing funding and support for hosting international competitions like the Olympics. These events present unique opportunities for showcasing climate initiatives on a global stage and setting new standards for eco-friendly event management. While government support is crucial, it is equally important to allow different sports to maintain their unique voices and approaches to climate action. Each sport, and location, faces distinct challenges and opportunities, and authenticity in climate efforts is key to engaging fans and stakeholders.

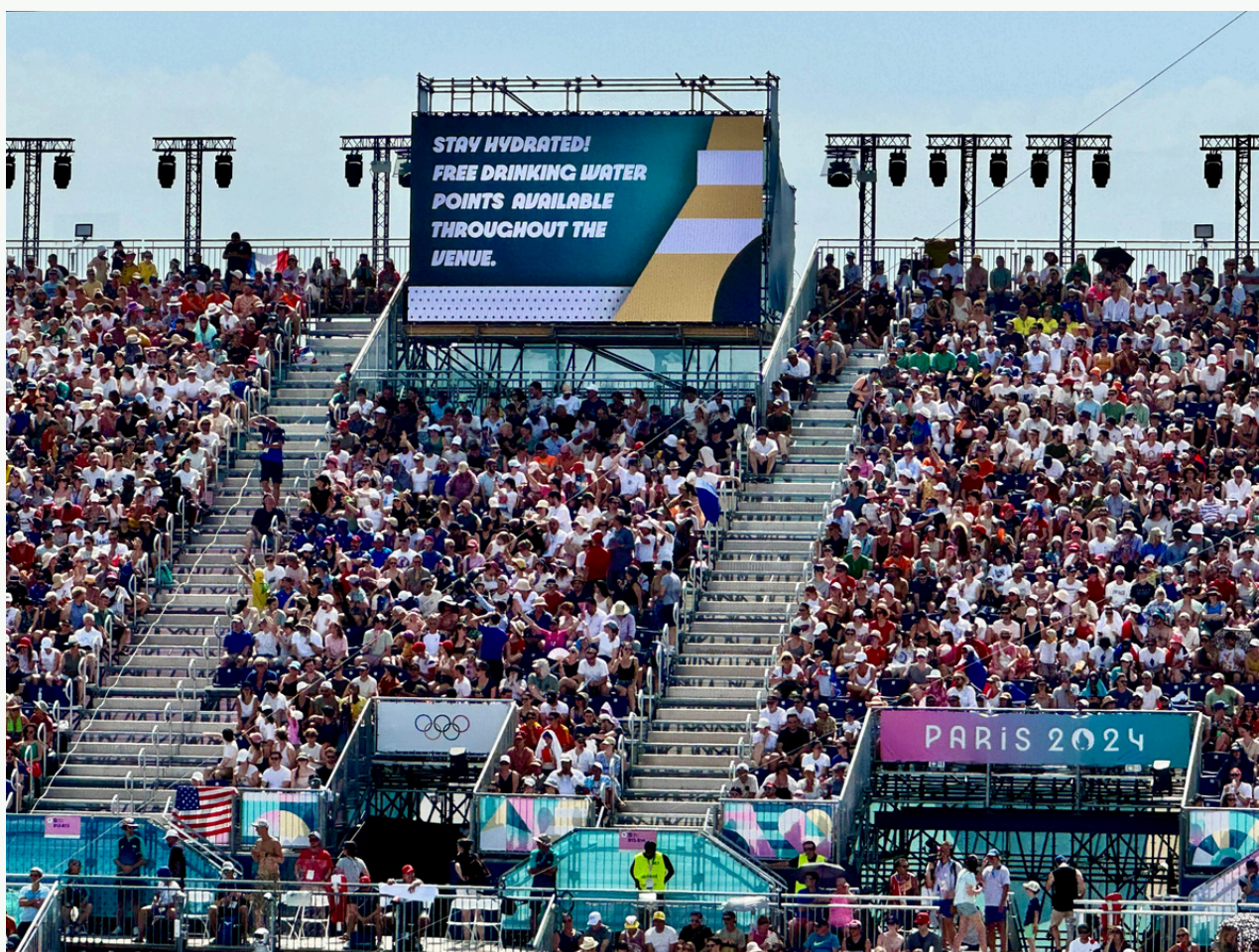
Sports organisations and clubs increasingly recognise the importance of government involvement in addressing climate change within the sports sector. Having government representatives present at sustainability summits and events (including Sport Positive) can signal the importance of these issues and foster collaborative problem-solving. By striking a balance between providing support and allowing autonomy, governance actors can help accelerate the sports industry's transition towards sustainability while respecting the diverse nature of different sports and organisations.

Conclusions and recommendations

Conclusions

Having been a niche consideration only a few years ago, sustainability in sport is becoming mainstream. Sports organisations have lagged behind other businesses and communities on climate action. Now, the sporting world is beginning to recognise its unique potential to become a sustainability leader, leveraging its cultural influence to drive change. **Sport's unparalleled ability to captivate global audiences and shape social norms positions it as a powerful catalyst for mainstreaming climate action.**

However, the sports industry is not yet realising its potential to lead on climate action. Our recommendations, informed by the psychology of environmental behaviour change, call on the sports industry to take a series of actions, to acknowledge and address its environmental impacts, to lead by example and to adopt multiple roles to promote wider social and political transformation.



Recommendations

1. Sports organisations and sportspeople must **think more expansively** about their contribution to climate action across multiple roles, including:

- Reducing their environmental impacts as **emitters**, especially on transport
- Leveraging their power as **hosts** of sporting events, changing habits by making actions more attractive and ideally the default
- **Advocating** for climate action, adding their voice to calls for change
- Mobilising **communities**, leveraging rivalry and competition to raise ambition
- Influencing **social change**, using athletes' and clubs' platforms.

2. Develop a greater understanding of **people's values** in different sports, which could include highlighting the unique relationships some have with nature, such as marine and winter sports. **Climate action may need to be framed differently** and can draw on the dangers of extreme weather faced by different sports.

3. Help to **overcome pluralistic ignorance** by highlighting examples of action across different sports and people: from grassroots to elite and fans to organisations.

4. The high carbon footprints of sportspeople and organisations are a real concern, but should not prevent them from using their voice to call for greater collective action if they are seen as trusted messengers and role models. **Telling personal stories** and demonstrating efforts to change can **make action more relatable**.

5. **Embed climate into the remit of senior staff** to emphasise the importance of climate action in strategy and across all teams, including aligning climate and commercial objectives, making climate action part of the organisational culture and leadership.

6. Explore and emphasise synergies between women's sports and climate change, highlighting where men's sport lags behind to **build pressure to act**.

7. Future research is needed to **address evidence gaps** highlighted in previous research,⁸⁸ including the role of sport in climate mitigation and adaptation in Africa, South America and Australasia,^{89,90} and women's sport and climate change.⁹¹

Methodology

In September 2024, the research team conducted a comprehensive literature review on behaviour change in organisations and sports. Additionally, the research team held online interviews with 14 people involved in different sports who could offer different perspectives on climate action within sports organisations and teams. This included sportspeople themselves as well as those working in organisations with responsibilities covering sustainability, commercial, coaching and performance, and policy.

Participants were involved in football, climbing, rugby, basketball, winter sports, athletics and sailing, with some working in organisations which covered a variety of sports. The research was international, with interviewees or organisations based in specific countries (Barbados, Spain, United Kingdom and United States) and others having a global reach. Interview questions explored participants' personal engagement with climate action and that of their wider team/organisation, responsibility, leadership, barriers and enablers to change.

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