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# Nature Action

# Sport's Best Offense and Defense Against the Climate Crisis

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From flooded stadiums to dwindling snow on ski slopes, the climate and nature crises are no longer distant issues—they are reshaping the world of sports. Yet, while sports face these urgent threats, they also hold power to drive change.

For many sports organisations, climate action often centres around reducing greenhouse gas (GHG) emissions. However, fewer recognize the full impact they have on nature or the vital role nature plays in stabilizing the climate. To address these challenges effectively, it's essential to understand how climate and nature are interconnected and why protecting both is critical to the future of sports.

Paul Green/Unsplash

## Nature and Climate: How Are They Tied Together?

Climate and nature are deeply connected. Nature, through its rich diversity of species and habitats, plays a critical role in helping to adapt and become more resilient to climate change as well as to reduce the pace of this change. This variety in plant, animal, and other species - known as biodiversity - is essential for the health of ecosystems that support both people and the planet. It is estimated that nature-based solutions (NbS) could contribute one-third of the emissions reductions needed to keep the increase in average global temperatures below 2 degrees Celsius by 2030.

When ecosystems are healthy, they provide essential services that sustain human well-being, economic activity, and even sports. Clean air, healthy environments, and natural resources all play vital roles for athletes' performance, the materials used for equipment, and the quality of arenas and fan experiences. Healthy ecosystems act as the foundation for sports—whether in outdoor venues, indoor facilities, or community spaces—and protect sports by building its resilience against climate impacts.

But sports organisations not only depend on these natural 'services', they also impact them. With thousands of events, operations, and infrastructure projects, the sports sector contributes to climate change and biodiversity loss, gradually diminishing nature's ability to provide these essential services.

# THE HIDDEN IMPACT OF SPORTS

## How Events Can Affect Nature and Climate

**High carbon emissions** from athlete, staff, and spectator travel contribute to global warming.

**Deforestation for event spaces** can reduce nature's ability to absorb carbon, worsening climate change effects.

**Light and noise pollution** can disturb local wildlife, altering their behavior and breeding patterns.

**Habitat destruction** from permanent and/or temporary venue construction and event infrastructure can displace local wildlife populations.

**Waste and pollution** from food packaging, plastic bottles, and chemical runoff can harm ecosystems in and around sports venues.

**Event timing can clash with nature** sports events held during key wildlife seasons, like breeding or migration, can cause major disruptions.

**Energy-intensive venues** require substantial electricity for lighting, heating, and cooling, often relying on fossil fuels.

**Disrupting wildlife migration** Large events and crowds can block or interfere with natural migration paths.

**Invasive species introduction** through imported turf, plants, or accidental transport can threaten native ecosystems.

**Agricultural emissions** from food supply chains contribute to greenhouse gases and deforestation.

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# How Climate Change Impacts Nature and Sports

Climate change disrupts natural systems, reducing their ability to provide essential services that sports organisations rely on. These include:

1. **Natural Resources:** Protect nature and avoid damage to natural habitats and species;
2. **Natural Protections:** Forests, wetlands, or green spaces help clean the air, cool temperatures, reduce flooding and drought risks as well as soil erosion.
3. **Recreational Spaces:** Parks and outdoor areas, which are important venues for sports.

Forrest Moreland/Unsplash

When ecosystems are weakened by climate change, their ability to deliver these services is reduced:

1. **Higher Temperatures:** Rising temperatures stress plants and animals, sometimes forcing them to relocate or leading to species loss. For sports, this can mean fewer healthy outdoor spaces.
2. **Extreme Weather:** More frequent floods, storms, and droughts damage ecosystems. For example, storms can cause coastal erosion that threatens facilities near water, and droughts limit water availability for sport facilities.
3. **Loss of Carbon Storage:** Forests and grasslands store carbon, helping to reduce global warming. When these areas are damaged, they release carbon back into the air, worsening climate change.

Emrah Yazicioglu/pexels

## How Nature Protection and Restoration Support Climate Action

Protecting natural areas helps fight climate change. By investing in nature-based solutions—like replanting forests and restoring wetlands—sports organisations can help reduce carbon emissions and support a stable climate.

1. **Carbon Storage:** Trees, mangroves, sea grass, and other vegetation capture carbon from the air, which can offset emissions from travel, events, and construction.

2. **Protecting Key Ecosystems:** Wetlands, mangroves, and grasslands store significant amounts of carbon and protect against storms and floods. For instance, mangrove conservation can reduce storm damage to coastal facilities.

3. **Restoring Degraded Land:** Planting trees and restoring natural areas not only stores carbon but also creates habitats for wildlife, supporting biodiversity.

## Nature's Role in Adapting and Building Resilience to Climate Change

Nature also helps communities and sports organisations prepare for the impacts of climate change and build resilience against extreme weather events, which are becoming more severe and more common:

1. **Flood Control:** Wetlands and forests act as natural buffers, absorbing water during heavy rains. Sports organisations near rivers or coasts can benefit by supporting wetland conservation.

2. **Cooling Green Spaces:** Trees and green areas cool the air, reducing temperatures at sport facilities and making them safer for athletes and fans during heatwaves.

3. **Soil and Water Conservation:** Healthy ecosystems prevent erosion and support water supplies, which are essential for the operation of sports facilities.

4. **Biodiversity as a Buffer:** Diverse ecosystems adapt better to change. For sports, this means fewer disruptions from pest outbreaks or plant diseases.

# How Sport Organisations Can Take Action for Climate and Nature

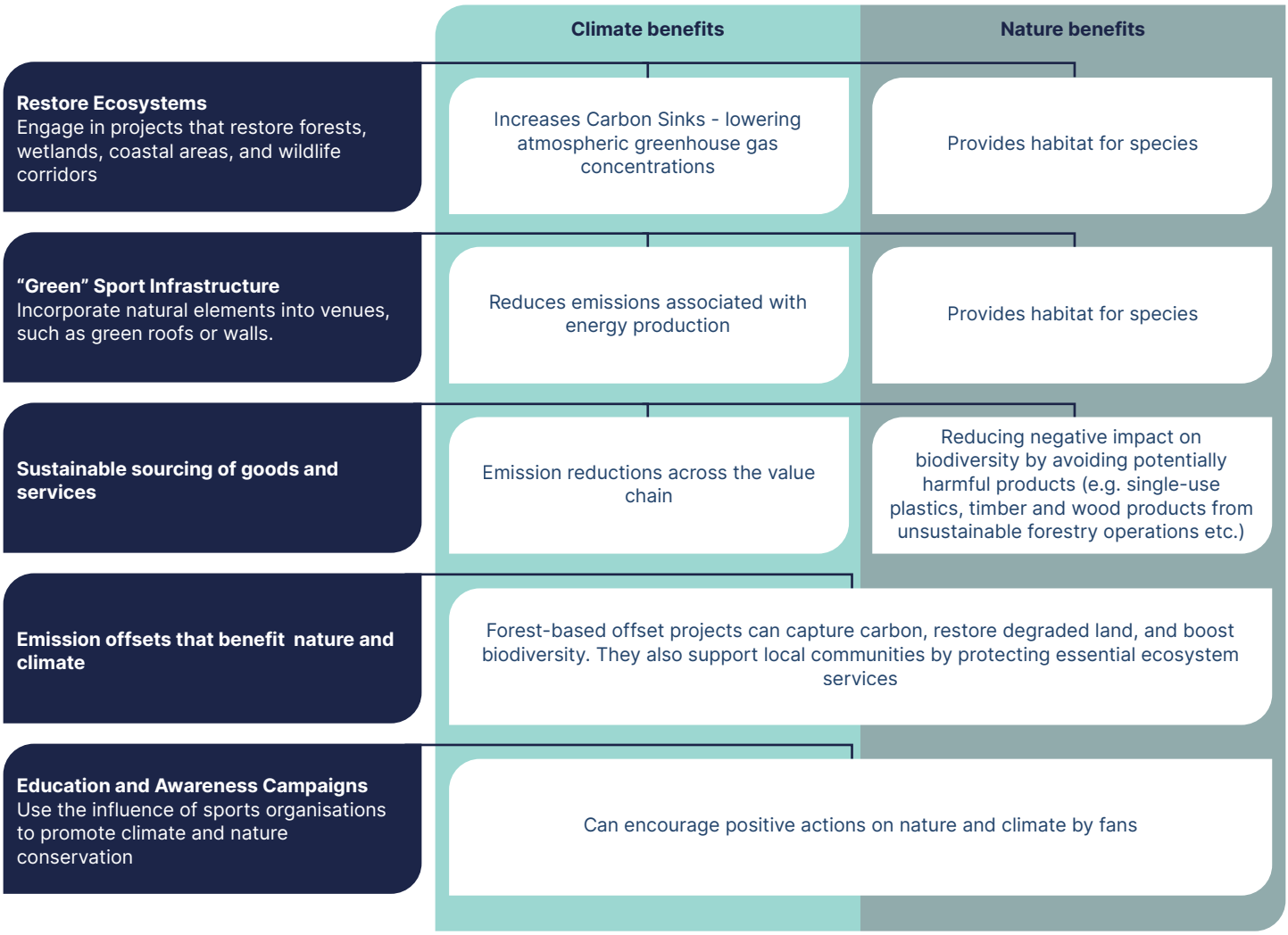
Two frameworks have been established to simplify, support and guide sport organisations' climate and nature actions: the Sports for Climate Action Framework and the Sports for Nature Framework.

The Sports for Climate Action Framework aims at supporting and guiding sports actors in achieving global climate change goals, including the measurement, goal setting, and reduction of greenhouse gas emissions.

The Sports for Nature Framework aims to enable sports to champion nature and contribute to its protection and restoration.

# Examples of actions sports can take to address climate and nature

Sports organisations can take practical actions to address climate change and, at the same time, protect or enhance biodiversity.



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## Join the Sports for Nature community

By committing to the Sports for Nature Framework, sport organisations join a community dedicated to leveraging sports towards the protection and restoration of nature. Contact the Sports for Nature team to learn more about the Framework and discuss how you can get involved.

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