

Chapter 19

Sustainability Challenges in the World of Football: How Can a Club Become Carbon Neutral? A Case Study of the Forest Green Rovers

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ABSTRACT

Football is the most popular sport in the world - and also quite environmentally polluting. Professional teams operate massive stadiums that consume large amounts of electricity and water continuously. Fans consume food and drinks during matches, resulting in a significant amount of plastic waste. Additionally, the transportation of players, coaching staff, and especially fans also have environmental impacts and carbon footprints. However, there is one club that has decided to show that sustainability principles can be applied to football as well. The Forest Green Rovers, an English fourth-tier club, have become the world's first carbon-neutral football club and also the world's first vegan football club, serving as a model for other sports clubs. This chapter highlights their case.

1. INTRODUCTION AND BACKGROUND

Football is the most popular sport in the world and, at the same time, quite environmentally polluting (Wilby et al., 2022). This leads to a multitude of sustainability challenges that warrant emphasis. These challenges include the following. Teams playing in higher divisions typically operate massive stadiums that require heating, lighting, and other energy-intensive facilities, which often rely on non-environmentally friendly solutions. The irrigation of the grass involves significant water usage, while special night-time lighting is employed to promote its growth. Furthermore, the turf is heated to prevent freezing. The large screens, scoreboards, and advertising boards also consume substantial amounts of energy (UNFCCC, 2019). During matches, spectators consume food and beverages, and the environmental friendliness of

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their production, including the packaging, is of great significance. It is well-known that a single football match can generate a significant amount of plastic waste. In the restrooms, there is a substantial water consumption, and the toilets are mostly flushed with clean drinking water, which again leads to wastage. Additionally, the transportation of players, coaching staff, and fans, contributes to carbon emissions. Thus, a single match day can cause a substantial environmental burden (Mizsur, 2019). As an example, the carbon footprint of the FA Cup final in the 2003/04 season equated to half the annual carbon footprint of 110 British citizens (Collins et al., 2007).

For a long time, experts have been concerned with finding ways to reduce this burden, leading to the emergence of numerous practical approaches (Ráthonyi-Ódor – Ráthonyi, 2020):

- Transformation of transportation and logistics systems.
- Preparation of various reports (environmental, sustainability, CSR, shared value creation) serving external communication purposes.
- Encouraging employees to adopt environmentally and health-friendly behaviors, as well as providing internal training to expand their awareness and knowledge.
- Motivating partners and stakeholders to adopt green initiatives.
- Utilizing cleaner technologies.
- Waste minimization.
- Recycling and the use of recycled materials.
- Energy rationalization.
- Harnessing renewable resources.
- Examining the environmental impact of products and activities (environmental footprint, eco-efficiency, ecological matrices, carbon footprint).
- Incorporating environmentally friendly products.
- Utilizing labels and certifications applied to environmentally friendly products, such as BREEAM, ISO 14001, EMAS, LEED.

Taking a specific approach focused on football clubs, according to a report published by the Sports Positive Summit in January 2021, clubs have the opportunity to directly impact the environment and operate more sustainably in eight areas:

- Use of renewable energy sources.
- Energy efficiency.
- Water usage efficiency.
- Environmentally friendly transportation methods.
- Waste management.
- Substitution of single-use plastics.
- Availability of plant-based or low-carbon footprint food.
- Communication and commitment towards green goals.

Although the Sports Positive Summit analyzed Premier League teams, according to FIFA, the Fédération Internationale de Football Association, the greenest club is currently Forest Green Rovers, competing in the fourth tier of English football, who became the first football club to earn the UN's title of carbon-

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