

# Evaluating Environmental and Ethical Performance in Sports Footwear

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## Abstract

Customers and stakeholders increasingly expect companies to be transparent about their ethical and environmental practices, as sustainability becomes a more significant issue in the fashion and sportswear sectors. This research uses a comparative analysis based on secondary data to assess the ethical and environmental performance of several international sports footwear brands. A structured evaluation is used to assess brands such as Nike, Adidas, Puma, Allbirds, Veja, and ASCIS. Some of the covered topics are labor practices, supply chain transparency, carbon emissions, the use of sustainable materials, and circular economy activities. Every business receives a score on a uniform scale, determined by third-party indexes, ESG databases, and publicly accessible sustainability reports and data. The results aim to shed light on potential greenwashing, highlight best practices, and provide readers with a clearer understanding of the current sustainability of the sports footwear industry. This research promotes more responsible and successful sustainable business practices in the athletic footwear market by providing insightful information to scholars, customers, and business executives.

**Keywords:** Sustainable consumption, sports footwear, environmental performance, ethical business practices, corporate sustainability.

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## Introduction

Due to growing demands from investors, regulators, and consumers for accountability and transparency regarding environmental and social implications, sustainability has emerged as a key issue in the global apparel and footwear sector. The sports footwear industry presents both particular opportunities and challenges in promoting sustainable production and consumption due to its extensive material and energy consumption, as well as its intricate global supply chains. In addition to lowering their carbon footprints and resource consumption, brands are also expected to guarantee moral labor standards and develop waste-reduction circular economy models. Concerns over greenwashing and the veracity of company reporting are raised, nevertheless, when brand sustainability claims and real practices diverge. Using a multi-criteria framework that incorporates publicly available data and third-party assessments, this study aims to analyze and assess the ethical and environmental performance of top sports footwear brands, producing a thorough and impartial review.

Although concerns exist about the global fashion industry's carbon footprint, technological advancements are helping to enhance its effectiveness and environmental efficiency in footwear production (Ghimouz et al., 2023). Global demand for stylish and comfortable footwear for people of all ages has increased due to several factors, including the rapid growth in demand for designer shoes, rising per capita incomes in both developed and emerging economies, and the increasing popularity of high-end footwear among males, particularly in sports. The footwear industry's market share has expanded rapidly, attracting an increasing number of new competitors (Jiang, 2019).

Three interconnected issues currently affect the materials used by the fashion industry: a lack of recyclability, a shortage of resources, and the potential for higher prices for some virgin materials (Sengupta & Sengupta, 2019). Faced with the challenge of integrating sustainability into their business policies and practices, companies such as Patagonia and Banana Republic are adopting more expensive eco-friendly substitute materials, like Lyocell (produced from wood pulp with minimal environmental impact), into their product lines (Sengupta & Sengupta, 2019).

Jung (2024) underlines that sports have been one of the most rapidly globalizing businesses. As the sports business continues to grow, new companies are appearing, and international sports brands are expanding steadily. In this context, sportswear companies have been increasing their economic influence by influencing consumers' purchasing decisions through their association with athletes and teams. Sportswear companies that cater to a diverse range of customers are crucial to the effective implementation of environmentally friendly marketing techniques.

Kopplin (2023) notes the paradox within the sports industry, indicating that more research is needed in the field of sustainable sportswear related to sustainability. Sports fashion is promoted to convey joy, athletic prowess, and self-care. Sustainability, future-focused self-care, caring for others, and engaging in physical experiences—often in nature—should therefore be a strong fit for sports fashion firms. Conversely, sportswear is frequently manufactured under challenging working conditions and using non-sustainable materials (Kopplin, 2023). It is essential to address sustainability concerns, given the significant levels of pollution generated by the fashion industry as a whole.

The significance of this topic is examined through several factors, including a highly competitive market (Nurkomariyah & Sutjiatmo, 2023; Bursan, 2023) which make the need for companies to develop different strategies that make their products more relevant at the market including sustainability ones, diverse consumer expectations

(McKinsey & Company, 2025; Astute Analytica, 2025; Zou et al., 2025) also are recognized as important factor that leads to change in brand strategy development and the fact that they lean more toward sustainable solutions, a high environmental footprint (Pantazi-Băjenaru et al., 2024; Bodoga et al., 2024; Adidas, 2023) showed the urgency of change, and high consumer demand (Chew & Leng, 2016) makes this topic one of the most significant importance.

Jang and Choi (2025) elaborate on the potential environmental impact of outdoor sport brands, emphasizing the shift in customer preferences that leads to changes in the way brands operate. In the same vein, Kim and Oh (2020) note that the sustainability characteristics of products have a significant impact on purchase intention, which further underscores the importance of changing the product types offered by sports brand companies. The paper aims to research the extent to which sports brands have adjusted their offerings to meet sustainability standards, observing different criteria that demonstrate the green character of their products.

## Methodology

This research assesses the ethical and environmental performance of several international sports footwear companies using a comparative evaluation methodology and secondary data. The use of recycled and sustainable materials, carbon emissions and climate targets, supply chain transparency, labor conditions, circular economy activities, and the clarity of sustainability reporting are the five main factors analyzed in this study.

The sample includes six globally known brands: Adidas, Nike, Puma, Veja, Allbirds, and ASICS. These brands were selected based on their market significance and the availability of publicly accessible data related to sustainability.

A standardized scoring matrix was used to evaluate each brand, and each of the five categories received a single score. All factors were scored uniformly using a five-point scale (0–4):

- 0- No proof or information not revealed;
- 1- Little work, generalized or ambiguous statements;
- 2- Moderate implementation or incomplete data;
- 3- Data-supported, explicit actions;
- 4- Extensive, creative, and thoroughly recorded practices.

Document analysis of the most recent data (2023–2024), including brand websites, third-party indexes (such as the Fashion Transparency Index and CSRHub), and business sustainability and ESG reports, was used to assign scores. Transparency, quantifiable impact, and independently verifiable processes were given top priority in the evaluation.

The results are presented in Table and Chart and analyzed in a comparative manner.

## Results

First, it is important to include an overview of the brands included in this analysis. The first brand analysed was Adidas. This company of sustainable footwear aims to achieve net-zero carbon emissions by 2050 and has pledged to use 100% recycled polyester by 2024.

The business releases an annual sustainability report that includes information on its progress in material sourcing, climate action, and circular initiatives such as the "End Plastic Waste" initiative. Adidas' commitment to labor rights is evident in its supplier list and third-party audit results, although some regions demand greater transparency.

Take-back programs and the creation of completely recyclable shoes (e.g., Futurecraft Loop, Figure 1) are examples of circular projects.

Figure 1  
Loop plans – Adidas



Source: <https://sustainabilitymag.com/sustainability/how-adidas-is-innovating-to-make-sportswear-more-sustainable>

It is shifting its approach to circularity and is committed to establishing a leather supply chain free of deforestation by 2030 at the latest. Additionally, Adidas has pledged to source more sustainable cotton, using Better Cotton or certified organic cotton for 96.2% of its cotton and third-party certified leather for 99.9% of its leather.

The following company was analyzed: Nike. Nike uses Flyleather (made with at least 50% recycled natural leather fiber) and targets a 30% reduction in carbon emissions by 2030. The 2023 report highlights improvements but offers limited supplier transparency. Third-party audits are reported, but full supplier lists are not public.

Labor practices disclosures are moderate, focusing primarily on policy statements rather than detailed outcomes.

Puma has committed to using 50% recycled polyester by 2025 and achieving climate neutrality by 2030. Publishes annual sustainability data with moderate detail on environmental targets and labor standards. Transparency regarding suppliers exists, but it lacks full public disclosure; audits are conducted regularly. Circularity efforts include product take-back programs, although they are limited in scale compared to Adidas.

Veja is a pioneer in transparency and sustainability, using organic cotton, wild rubber from the Amazon, and recycled materials. Publishes detailed supplier info and labor standards verified by third parties. No net-zero target has been announced, but there is a strong focus on local sourcing and fair trade. Circular initiatives are limited, but product longevity and reparability are emphasized. Compared to other companies that create their goods in East Asia, the cost of making VEJA sneakers is 30% higher. This is because we use organic and fair trade raw materials, which ensure a more equitable economic approach throughout the entire production process.

Allbirds is carbon neutral, offsetting emissions across operations and the supply chain. It uses innovative materials like sugarcane-based EVA, merino wool, and recycled fibers. It publishes detailed annual impact reports, including scope 1, 2, and 3 emissions data. Strong circular initiatives include packaging reduction and a take-back program launched in 2023. A redesign of packaging, resulting in a 7% reduction, and a wider adoption of renewable energy, which contributed to a further 2% reduction, were among the initiatives that propelled 2023's advancement.

The last brand included in this research is ASICS. This brand publishes sustainability goals, aiming for a 30% reduction in greenhouse gases by 2030 and an increase in recycled material use. Reports are less detailed compared to others; supplier transparency is moderate. Circular economy practices are emerging but limited. The company's progress toward its medium- and long-term sustainability goals was detailed in ASICS' 2024 Sustainability Report. The two main pillars of ASICS' sustainability framework, "People" and "Planet," which are incorporated into its VISION2030 and the Mid-Term Plan 2026, serve as a roadmap for sustainability initiatives that are in line with the Sustainable Development Goals (SDGs) of the UN. Additionally, all of ASICS' strategic Tier 1 footwear suppliers now have explicit commitments to obtain renewable energy, and the company has increased the percentage of recycled polyester in its products to over 50%.

Third-party sustainability indexes like CSRHub ESG Ratings and the Fashion Transparency Index (Fashion Revolution) can help understand sports footwear brands' ethical and environmental performance. These indices supplement company disclosures by providing standardized frameworks for assessing governance, labor standards, transparency, and environmental impact.

The Fashion Transparency Index 2024, for instance, praises companies like Veja and Allbirds for their excellent sustainability and transparency messaging. Bigger companies like Adidas and Nike make significant strides but still have issues with supply chain openness. Adidas and Allbirds are ranked highly by CSRHub for their ESG performance, whereas ASICS has room for development, while Nike and Puma have made just modest strides.

A clear ranking or scoring system tailored to the sports footwear industry is not always present or readily available, despite the fact that these reports provide insightful benchmarking and extensive qualitative evaluations.

By offering a simple performance hierarchy, future iterations of these indices would be more helpful to stakeholders if they included explicit, comparative rankings (Table 1). Customers, investors, and business executives would be able to benchmark more directly and make better decisions with the help of this update.

Table 1  
Scoring

	<b>Brand Materials (0-4)</b>	<b>Carbon Goals (0-4)</b>	<b>Labor Transparency (0-4)</b>	<b>Circular Economy (0-4)</b>	<b>Reporting Clarity (0-4)</b>	<b>Total</b>
<b>Adidas</b>	4	4	3	4	4	19
<b>Nike</b>	3	3	2	2	3	13
<b>Puma</b>	3	3	2	2	3	13
<b>Veja</b>	4	2	4	2	4	16
<b>Allbirds</b>	4	4	3	3	4	18
<b>ASICS</b>	2	2	2	1	3	10

Source: Authors' work

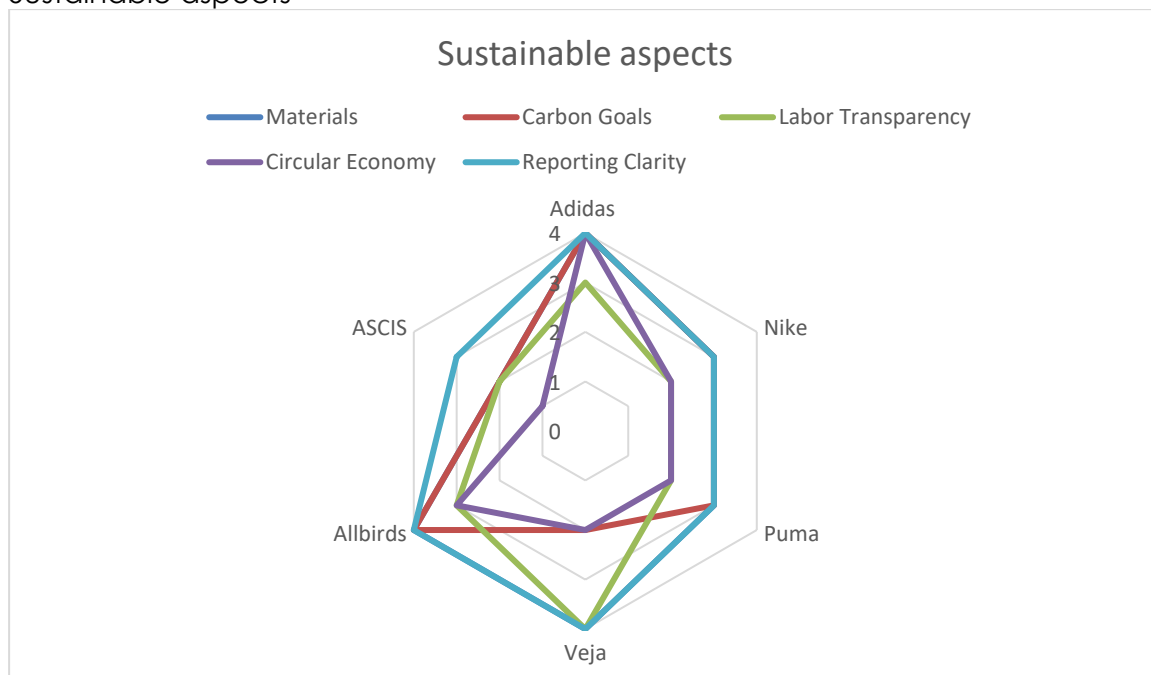
Adidas leads the company with significant commitments in all areas, particularly in projects related to the circular economy and materials innovation, which are backed by thorough and transparent reporting. Although their supplier transparency is good, audit disclosures could yet be improved.

Allbirds closely resembles Adidas, with a focus on materials innovation and carbon neutrality. It provides thorough, quantifiable impacts and has excellent reporting

clarity. Though not as comprehensive as Adidas' vast take-back programs, the circular economy initiatives are commendable.

Veja is a transparency pioneer, and it stands out for its outstanding transparency on labor practices and sustainable material sourcing. Its carbon goal score, however, is constrained by the lack of specific carbon reduction targets. In terms of labor transparency and circularity, Nike and Puma both make modest strides but fall short of Adidas and Allbirds. Nike's limited supplier disclosure reduces its score despite innovation in materials. ASICS ranks lowest due to its less detailed sustainability disclosures, limited circular economy initiatives, and moderate transparency in labor practices, highlighting areas for growth.

Figure 2  
Sustainable aspects



Source: Authors' Illustration

A radar chart was used to visually assess the ethical and environmental performance of the selected sports footwear brands (Figure 2). The chart evaluates five main criteria: use of sustainable materials, carbon emissions and climate targets, labor conditions, supply chain transparency, circular economy initiatives, and the clarity of sustainability reporting. It highlights both the strengths and weaknesses of each brand, making it easy to compare them from multiple angles.

Larger, more established brands like Adidas and Allbirds show comprehensive sustainability strategies that address social and environmental issues. In contrast, brands with smaller or uneven polygons reveal inconsistent performance and areas needing improvement, such as ASICS's limited labor transparency and circular economy efforts.

By clearly showing performance gaps, identifying industry leaders and laggards, and providing an overall view of sustainability profiles, this visualization supports the quantitative findings.

## Discussion

An examination of the ethical and environmental performance of top sports footwear companies reveals a complex and diverse landscape, marked by both notable advancements and significant challenges. Adidas and Allbirds stand out as leaders in the sector due to their comprehensive sustainability plans, which incorporate cutting-edge material usage, ambitious carbon reduction goals, and transparent reporting procedures.

Adidas's pledge to use only 100% recycled polyester and achieve net-zero emissions by 2050 exemplifies a comprehensive strategy, while Allbirds' carbon-neutral business practices and transparent disclosures demonstrate how smaller, more flexible businesses can have a significant impact.

In contrast, Veja's exceptional transparency in labor practices and sustainable sourcing underscores the critical role of ethical supply chain management, even though it lacks formalized climate goals—a divergence reflecting differing brand philosophies and scales.

Meanwhile, Nike, Puma, and ASICS demonstrate moderate to insufficient progress, particularly in terms of labor transparency and circular economy initiatives. Nike's material innovations are somewhat overshadowed by limited supplier disclosure, raising concerns about the completeness of its sustainability narrative. Puma and ASICS reveal the ongoing need for enhanced transparency, rigorous reporting, and more substantial commitments to circularity.

These disparities highlight a significant risk of greenwashing, especially when marketing claims exceed verified disclosures, which could erode consumer trust. The strong positive correlations observed between labor transparency and reporting clarity, and between material innovation and carbon goals, indicate that integrated sustainability efforts promote greater accountability and authenticity. However, the weaker links involving circular economy initiatives suggest that this remains an emerging area requiring further development.

## Conclusion

Results of this analysis identifies leaders demonstrating integrated and transparent strategies, alongside companies still facing substantial ethical and environmental challenges. It showcases the varied sustainability performance across the sports footwear industry. The findings emphasize that true success depends on full transparency and commitment to circular economy principles, along with ambitious climate targets and material innovation. Results also show that companies note the need to adjust to the sustainability requirements but that this process needs time and effort to be completed. It seems more that efforts are continuous and that results are only visible when persistent approach is applied by brands.

To increase consumer trust and reduce the likelihood of greenwashing, it remains imperative to close gaps in labor practices and supply chain transparency. Improving independent verification and reporting standards will be essential in the future to promote significant industry-wide change.

In the end, this research emphasizes the significance of all-encompassing, validated sustainability tactics as the cornerstone for long-term influence on the consumption of athletic footwear.

This research's dependence on secondary, publicly accessible data has limitations, such as possible reporting biases and a lack of field verification. Future studies would

benefit from mixed-method approaches that include supply chain audits and stakeholder interviews to gain a deeper understanding.

From a practical standpoint, these results underscore the need for companies to enhance supply chain transparency and implement circular initiatives, enabling consumers and policymakers to make more informed decisions and drive the sector toward genuine, systemic, and sustainable change.

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