LISBON INVESTMENT SOCIETY | EQUITY RESEARCH

Fashion Industry

Sustainability Report

January 2026

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Executive Summary

The global fashion industry is one of the most dynamic and influential sectors in the world, generating around $1.7 trillion in annual revenues and shaping both cultural identity and economic activity. Built on complex and highly globalized value chains, the industry combines creativity and scale with intense competition and fast-changing consumer trends. However, this same structure makes fashion one of the most resource-intensive and environmentally impactful industries, placing sustainability at the center of its long-term viability.

On the environmental dimension, the report identifies greenhouse gas emissions, water consumption, and waste management as the most material risks. Fashion is estimated to account for 8–10% of global carbon emissions, with Scope 3 emissions representing the dominant share due to outsourced manufacturing and logistics. The study highlights the importance of renewable energy adoption, supplier engagement, and circular economy strategies to reduce environmental impact across the supply chain.

The social and governance sections assess labor conditions, human rights, diversity and inclusion, and corporate oversight structures. The report reviews how leading brands manage workforce safety, supplier compliance, and community engagement, as well as how ESG is integrated into board structures, executive compensation, and disclosure practices aligned with frameworks such as GRI, SASB, and TCFD. It concludes by outlining the key regulatory, market, and strategic factors shaping the future of ESG performance in the fashion industry.

What ESG stands for?

ESG stands for Environmental, Social, and Governance. It represents the core pillars used to assess a company's sustainability practices and ethical impact on its employees, society, and the environment. ESG provides a set of criteria that investors, customers, and other stakeholders use to evaluate a company's performance beyond traditional financial metrics, focusing on its long-term viability, risk management, and overall responsibility. Each component of ESG addresses different dimensions of corporate impact:

- Environmental: Evaluates how a company affects and manages its interaction with the natural environment. Examples: Carbon emissions, energy efficiency, waste management, pollution control, and responsible use of natural resources
- Social: Focuses on how a company manages relationships with employees, suppliers, customers, and the communities in which it operates. Examples: Labor practices, human rights, diversity and inclusion, community engagement, and customer satisfaction.
- Governance: Examines the company's leadership, internal controls, and accountability structures. Examples: Board composition and diversity, executive compensation, shareholder rights, and corporate transparency. By integrating these three pillars, organizations can develop tailored strategies and measurable actions that strengthen sustainability performance and align with stakeholder expectations. (Byrne, 2023)

Industry overview

The fashion industry stands as a cornerstone of the modern global economy, influencing cultural identity, consumer behavior and economic activity across every region of the world.

In fact, the fabrication of clothing and footwear is one the most globalized production systems, requiring coordination between designers, suppliers, factories and retailers across the world. Leading brands rely on complex supply chains with strict quality standards, rapid production cycles and increasingly digitalized processes, highlighting the sector's scale and operational sophistication. Such that, fashion products are designed and manufactured through complex value chains which begin with raw materials, like cotton, wool, leather and synthetic fibers, with alternative materials, appearing in the last few years, including recycled fibers, bio-based textiles and lab-grown leather are becoming more prominent as sustainability pressures intensify While, also, involving design, production, logistic, marketing and retail.

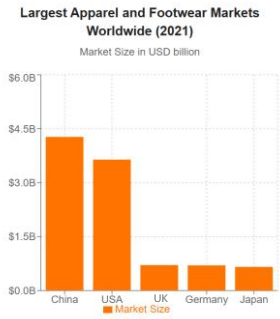


Figure 1. Source: FashionUnited, 2024

Is without doubt, one of the industries with the highest competition, specially with the dynamism that internet allows it to have, with high rivalry as companies battle to win market share, keeping profits growing, while lowering costs, achieving economies of scale. Being strongly a brand-driven industry that demands constant creativity and innovation to remain relevant, with trends fostering sales and a fast-paced society. While historically characterized by seasonal cycles and fluctuating consumer demand, long-term structural drivers for instance the e-commerce expansion, keep to support steady global growth.

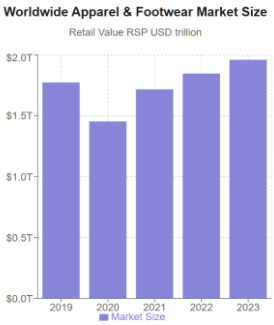


Figure 2. Source: FashionUnited, 2024

Indeed, with around $1,7 trillion in annual revenue, the fashion industry remains one of the world's most dynamic and influential sectors. In today's interconnected world, fashion extends far beyond clothing, it drives cultural trends, shapes identities, fuels global supply chains and increasingly integrates technology through digital retail, AI-powered design and virtual experiences.

Geographic production

As previously mentioned, being one of the most globalized sectors in the world, is characterized by vast and intricate Global Value Chains (GVCs). However, these networks are increasingly put at stake, by geopolitical tensions, trade restrictions, and ongoing supply chain disruptions that make it an increasingly riskier industry due to disruptions of the GVCs. Despite the industry's global reach, production remains highly concentrated in specific regions.

Firstly, Asian countries continue to lead global textile and apparel manufacturing with East and South Asia, particularly China, Bangladesh, Vietnam and India, lead in large scale production, that offers this area low labor cost. Such that, assembly, finishing and mass production are primarily concentrated in this areas. While, the United States and Europe, especially Italy and France dominates the sub-sector of high-end fashion design, brand and intellectual property (IP) being global leaders in luxury craftsmanship and premium fashion houses. Although manufacturing presence in Europe and the US has declined for decades, recent government initiatives, sustainability regulations and nearshoring strategies are contributing to a modest resurgence in domestic production capacity. At the same time, emerging markets in Africa and Latin America are expected to expand their roles within the global fashion supply chain as brand seek diversification and more resilient sourcing models.

Big players

The 12 major fashion companies include:

























For comparison terms, we will only consider 4 out these 12 major players, in our analysis, focusing on the sportswear and athletic brands.

Demand drivers

- **Shift to sustainable materials:** Sustainable and recycled fibers (such as organic cotton, recycled polyester and bio-based materials) have been the fastest growing segment as consumers and regulators push for environmentally responsible fashion.
- **Digital transformation & E-commerce** Explosive growth in online retail, AI-driven personalization and digital tools. Demand for faster supply chains, virtual try-on and data-driven merchandising is a major driver of investment.
- **Athleisure & Lifestyle shifts**: Strong global demand for sportswear, performance fabrics and comfort-driven apparel. The expansion of hybrid work models has accelerated long-term athleisure growth.
- **Advanced manufacturing**: Automation, digital prototyping and 3D knitting are reshaping production models and improving consumer customization as brands seek beyond traditional low-cost sourcing.
- **Government incentives**: Policy measures to strengthen domestic production and sustainability compliance – such as subsidies, favourable tariffs regimes, R&D tax credits and reshoring incentives.

ESG and the fashion sector

The fashion industry shows no signs of slowing down, and as production expands, it is becoming increasingly carbon intensive. The manufacturing of textiles, apparel and footwear involves resource heavy processes that consume large amounts of energy, water, chemicals and raw materials. The growing demand for affordable and fast-produced clothing is followed by rising environmental pressure.

Both internal dynamics and external forces are driving the industry toward stronger environmental, social, and governance (ESG) alignment. Externally, regulatory frameworks are becoming more stringent, with new policies linking sustainability performance and transparency to market access and competitiveness. Stakeholder expectations are also rising with customers increasingly requiring suppliers to comply with sustainability goals, furthermore, investors, shareholders, and employees integrate environmental and social considerations into their decision-making process.

Fashion production is inherently associated with its reliance on energy, water, and raw materials, coupled with the significant environmental footprint of dyeing, finishing, logistics and end-of-life of its products. As the sector's global significance continues to grow, it becomes more important to assess its operations through an ESG lens. The fashion industry is both a cultural and economic force and a major contributor to global emissions and waste.

ESG principles play a particularly significant role in this sector because of its high resource intensity, including substantial water consumption, greenhouse gas emissions, and social challenges such as labor rights and working conditions. The full fashion value chain – from fiber production and textile processing to garment manufacturing, transportation, retail and disposal – is estimated to account between 8% and 10% of the global carbon emissions.

In this context, ESG reporting has become a cornerstone of responsible business practice. It enables companies to disclose data on their environmental impact, social responsibility, and corporate governance, thereby enhancing transparency and accountability. Through robust ESG reporting, fashion companies can communicate their commitment to sustainable and ethical practices to investors, customers, employees, and regulators, ultimately reinforcing trust and long-term resilience.

Outlook

Within the fashion industry is expected a sustained long-term investment, although marked by a short-term volatility with the ongoing economic uncertainty and shifting consumer behaviour.
This market was valued at approximately $795 billion in 2024 and it's projected to reach $1,64 trillion by 2033, representing a compound annual growth rate (CAGR) of roughly 8,3% between 2025 and 2033.
The industry's capital intensity and supply chain complexity contribute to a huge environmental footprint. Nevertheless, the sector is expected to achieve $2,26 trillion in annual apparel sales by 2030, requiring a CAGR of 4,2% between 2025 and 2030. If this growth continues, revenues could reach $2,6 trillion by 2035.

As mentioned before, new regions, particularly in Asia and parts of Africa, strengthening their role in global apparel manufacturing and retail growth, while established fashion hubs in Europe and North America increasingly focus on the sub sector of premium, luxury and sustainable segments. With expectancy of companies keeping transitioning towards higher efficiency, with transparency and ESG performance rapidly evolving from compliance requirements into core competitive differentiators, while achieving their own internally ESG-related established goals.

The demand for fashion continues to rise as global consumers adopt hybrid work lifestyles, digital shopping habits and more personalized purchasing patterns. The global fashion industry revenues are expected to grow steadily over the next decade. However, the scenarios vary:

- High-growth scenario: 6-7% CAGR, driven by e-commerce, sustainability-led brands and luxury categories.
- Slow-growth scenario: 1-2% CAGR if inflation and regulatory burdens persist.

Nevertheless, risks remain significant, with Persistent inflation, high logistic costs and rising labour expenses could pressure the margins through the next years. Regulatory tightening, especially regarding textile waste, carbon emissions and supply-chain transparency, may increase operational costs for fast-fashion and mass-market brands. Shifts in consumer behavior, such as the rise of second-hand markets and rental platforms, may also reduce demand for new low-cost apparel, similar to the correction seen in previous periods of oversupply and changing fashion cycles.

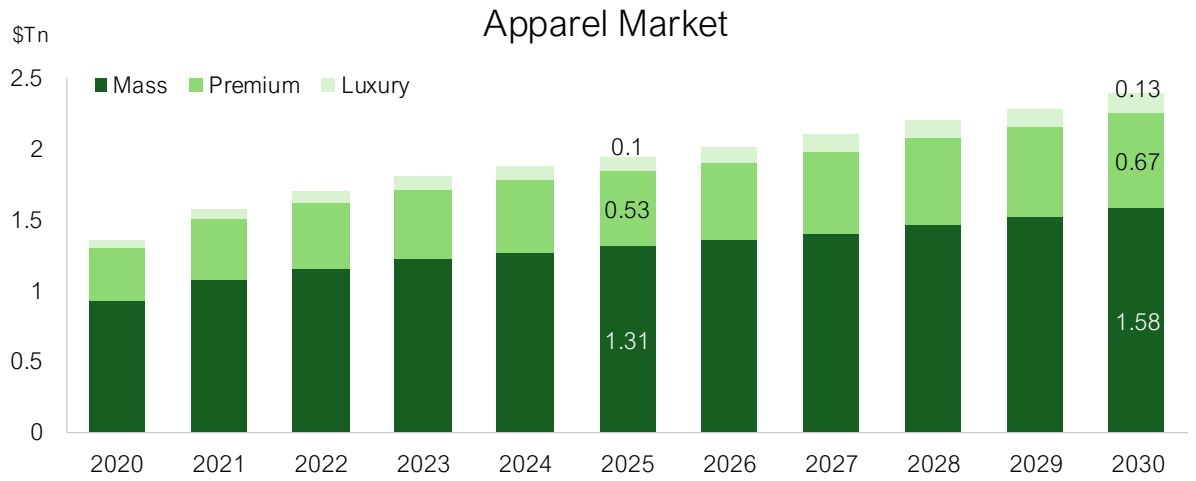


Figure 3; Source: Grand View Research, Apparel Market Analysis Report

Furthermore, significant geographic diversification is expected to accelerate across the fashion industry. This shifts are driven not only by geopolitical pressures, such as U.S.-China trade tensions, reshoring incentives and rising import tariffs, but also by the need to reduce overdependence on a small number of production hubs. The global fashion supply chain, long centred in Asia, is undergoing structural realignment as brand seek resilience, cost efficiency and sustainability. This diversification is most evident in two major areas:

1. Apparel and textile manufacturing - gaining competitiveness through lower labor costs, government incentives and improved logistics of new emerging hubs (Indonesia, Ethiopia, Morocco, Mexico, etc.).
2. Sourcing and raw materials – reduction of reliance on single-country suppliers for cotton, synthetics, and specialty materials (cotton sourcing spreading toward Brazil and West Africa) and recycled fibers and bio-based materials increasingly produced in Europe, Japan and South Korea.

Legal drivers shaping the industry by region

United States

SEC climate-disclosure rules (2024) tighten requirements for reporting emissions, climate risks and transition plans.

California's new climate disclosure laws (CCDAA & CRFRA) impose mandatory Scope 1–3 emissions reporting for large companies, including fashion brands and retailers.

Uyghur Forced Labor Prevention Act (UFLPA) bans imports containing any material linked to forced labor in Xinjiang — highly impactful for cotton and textile supply chains.

East Asia

China: Stricter environmental regulations for water discharge, chemical use and emissions in textile and apparel manufacturing along with growing adoption of ESG reporting guidelines at national and provincial levels. Geopolitical pressures affect export conditions, sourcing decisions, and traceability requirements.

Japan & South Korea: Strong stewardship codes and rising expectations for corporate sustainability reporting. Government guidance for decarbonizing textile production (energy efficiency, chemical management, waste reduction). No forced-labor import ban like the U.S./EU, but Japan is strengthening human-rights due diligence expectations and South Korea reintroduced in 2025 a draft Human Rights and Environmental Due Diligence Act for large companies.

Europe

Corporate Sustainability Due Diligence Directive (CSDDD) requires mandatory environmental and human-rights due diligence across the full value chain for large companies.

Ecodesign for Sustainable Products Regulation (ESPR) introduces rules for product durability, reparability, recyclability and the Digital Product Passport for textiles.

EU Forced Labor Regulation (starting 2027) bans products made with forced labor at any point in the supply chain.

Additional national regulations: Germany's Supply Chain Act (LkSG) and France's Duty of Vigilance Law.

Analysis

Environmental

Greenhouse gases emissions

The production and distribution of sports apparel and footwear contributes significantly to global carbon emissions. This footprint is driven by resource and energy intensive processes across the entire value chain, from raw material sourcing (such as cotton agriculture and synthetic material production like polyester) to transportation and the product's end-of-life stage.
Emissions are systematically categorized into three Scopes to differentiate where a corporation maintains either direct control or influence:

- Scope 1 emissions

Direct GHG emissions stemming from sources that are owned or controlled by the reporting company. This typically encompasses the combustion of fuel in corporate vehicle fleets, on-site heating for proprietary offices and distribution centres, and, to a lesser extent, the use of refrigerant gases (HFCs) within company facilities. They invariably represent the smallest proportion of total emissions for apparel brands, primarily because the bulk of their manufacturing is outsourced.

- Scope 2 emissions

Indirect emissions resulting from the generation of purchased electricity, steam, heating, or cooling consumed by the company's premises (e.g., corporate offices, owned warehouses, and retail stores). This is a manageable source of emissions, which companies can mitigate by procuring renewable electricity, for instance, via Power Purchase Agreements (PPAs) or Renewable Energy Certificates (RECs), as effectively demonstrated by brands like Puma and Nike in their own operations. While a larger percentage than Scope 1, it remains dwarfed by the overall environmental impact generated within the supply chain.

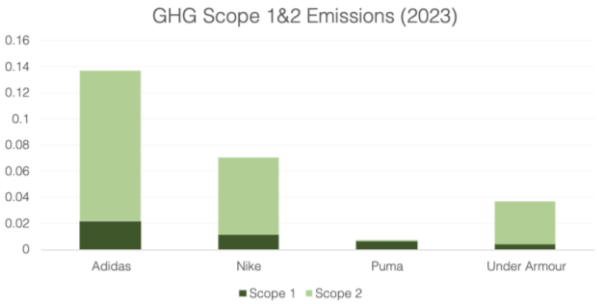
- Scope 3 emissions

Encompassing all other indirect emissions that occur across the company's value chain, both upstream (suppliers) and downstream (customers/end-use). This is the most **critical and material** scope, consistently accounting for **80% to 95%** of the sector's total carbon footprint. This includes:

- **Raw Materials:** The production of cotton, polyester, leather, and rubber.
- **Processing/Manufacturing:** Energy-intensive processes like dyeing, weaving, and stitching, which often rely on fossil fuels such as coal or gas.
- **Transportation:** The global distribution of finished goods from Asian manufacturing hubs to key consumer markets.
- **Product Use:** Consumer-related activities such as the washing and drying of garments.
- **End-of-Life:** The disposal and treatment of textile waste.

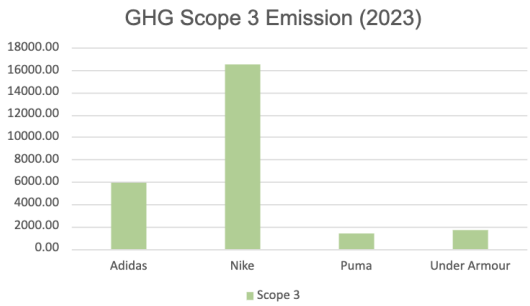
The paramount challenge for corporations is the abatement of these emissions, which necessitates deep collaboration and significant capital investment in Tier 2 and Tier 3 suppliers (material processors).

The analysis of operational carbon footprints (Scope 1 and 2 emissions) for the chosen four major sports fashion brands reveal that Scope 2 is the dominant factor across almost all, underscoring the critical need for an aggressive transition to renewable energy. Among the four companies, Puma emerges as the clear industry benchmark, achieving the lowest combined emissions by effectively neutralizing its Scope 2 footprint, making it significantly more efficient than larger absolute emitters like Adidas and Nike.



Source: Team Analysis

The analysis of Scope 3 emissions reveals that **Nike** is the dominant emitter by a vast margin. This staggering figure dramatically overshadows operational emissions: for Nike, Scope 3 is 234 times larger than its combined Scope 1 and 2, while for Adidas, it is 43 times larger, proving that the sector's climate success hinges almost entirely on **controlling Scope 3**. Though Puma has the lowest absolute Scope 3 emissions, its main challenge, like all others, is delivering credible percentage reductions aligned with initiatives like the Science Based Targets initiative (SBTi), making the Scope 3 chart the true measure of a brand's climate risk and leadership potential.



Source: Team Analysis

Transition to Renewables

The current state of the transition to renewable energy in owned operations demonstrates a clear divide in commitment and execution among major sports brands. **Puma stands as the operational leader**, having successfully achieved near-full Scope 2 decarbonization years ago through the sustained use of renewable electricity, resulting in extremely low operational emissions. In contrast, **Adidas** has shown ambition but continues to experience **notable volatility**, reflecting difficulties in consistently securing long-term renewable energy contracts across its global network. Crucially, **Nike** has significantly accelerated its **"Move to Zero"** program, rapidly closing the gap on operational decarbonization and now approaching Puma's level of achievement through a broad transition to clean electricity for its owned facilities. Meanwhile, **Under Armour** lags behind its peers, facing comparatively high Scope 2 emissions and **limited transparency**, indicating a still underdeveloped energy transition strategy. Ultimately, while Nike and Puma have made substantial progress in decarbonizing their own facilities, the next crucial step for the entire industry remains the large-scale expansion of renewable energy procurement deep into the Scope 3 supply chain.

Water consumption

Reducing water consumption is an existential imperative for the textile industry, driven by severe **environmental risk** and **operational vulnerability**. As water-intensive production strains already scarce resources in key manufacturing regions, companies face increased costs, regulatory penalties, and the risk of supply chain disruption due to droughts. Therefore, water efficiency, achieved through cleaner technologies and recycling, is not merely an environmental goal but a core **business risk management strategy** essential for maintaining operational resilience and protecting the brand's social license to operate.
Water management is the second most material environmental crisis for the sports fashion sector, with the bulk of the impact, driven by cotton farming and textile dyeing, occurring upstream. The industry's key metric is **Water Consumption** (Withdrawal minus Discharge), which must be managed alongside the quality of the return flow.
Nike, leveraging its immense revenue scale, leads by focusing on **freshwater restoration projects** in water-stressed regions to compensate for its consumption, while also implementing technical processes to significantly reduce water intensity in key supplier operations.
Adidas concentrates its strategy on supplier engagement, driving aggressive targets for **water intensity reduction** across its Tier 2 dyeing and finishing facilities and promoting water reuse programs to close the gap between water withdrawn and water discharged.
Puma maintains a strong focus on absolute reduction and pollution control, achieving high compliance with industry-standard wastewater guidelines and setting concrete volume reduction targets per product, validating its commitment through targeted cleaner production programs.
In contrast, **Under Armour** lags substantially due to a significant **transparency deficit**, failing to disclose key metrics like Water Withdrawal and Discharge. This lack of data makes it impossible to assess its water efficiency against revenue and exposes the company to elevated ESG risk, highlighting the critical need for supply chain risk disclosure in this resource-intensive sector.

Waste Management

Waste management is a critical governance area in sports fashion, driven by the need to drastically reduce resource-intensive production waste and mitigate the crisis of massive post-consumer textile landfill. The industry's evolution is defined by its transition to a Circular Economy, which integrates waste prevention, lifespan extension, and material recirculation.
Puma adopts a high-maturity, proactive stance by formally implementing a **"Product Life Cycle Design" policy**. This strategic commitment ensures that products are consciously engineered from the outset to be durable, repairable, and fundamentally recyclable, effectively tackling waste generation at its source, as evidenced in its governance disclosures.
Nike drives its waste strategy through its ambitious **"Move to Zero"** initiative, which is centered on achieving zero waste and zero carbon. Structurally, Nike maximizes the integration of high-content recycled polyester and actively manages the product end-of-life stage by scaling up reverse logistics through take-back and reuse programs, such as "Nike Refurbished," to extend the utility of its footwear.
Adidas similarly focuses on innovation and closing the loop, setting robust targets for incorporating **recycled polyester** and gaining high recognition for its influential partnership with **Parley for the Oceans**, which transforms collected marine plastic waste into high-performance materials. This approach firmly positions its waste management as a strategic imperative to transition away from a linear "take-make-dispose" model.
Conversely, **Under Armour** displays a significant **strategic and disclosure gap**. The absence of a reported formal "Product Life Cycle Design" policy suggests its waste efforts are likely more **remedial** (dealing with waste after it is created) rather than **preventative**, signaling an immaturity in integrating circularity into its core manufacturing and increasing its comparative risk exposure to the escalating textile waste problem.

Social

The social dimension of sustainability in the fashion industry, particularly for sportswear giants, centers on fostering fair, safe, and equitable environments for all people connected to their business. This involves a dual focus: ensuring the rights and well-being of workers in the global supply chain, and promoting diversity, equity, and inclusion within their own corporate workforces and communities.

For companies like Nike, Adidas, Puma, and Under Armour, this involves managing complex, multi-tiered supply chains where risks such as forced labor, unfair wages, and unsafe working conditions are prevalent. Simultaneously, these brands are increasingly accountable for their internal corporate culture, leadership diversity, and engagement with the communities they serve.

Workforce Demographics and Diversity Trends

Diversity, Equity, and Inclusion has become central to corporate strategy, with a focus on creating inclusive workplaces that reflect diverse consumer bases. Companies are setting specific targets to increase the representation of women and underrepresented groups in leadership roles and ensure equal pay structures.

- **Gender Balance in Leadership:** **Adidas** has set a specific target to achieve gender balance in leadership globally by 2033. In 2024, they reported that women's representation at this level had reached **40.7%**. Similarly, **Puma** aims for equal representation of women and men in leadership positions (at least 45% female/male) by 2030. **Nike** also tracks and reports on gender diversity, increasing the representation of women in leadership roles.

- **Pay Equity:** Ensuring equal pay for equal work is a key priority. **Puma** reported that its subsidiaries in several countries, including Germany and the U.S., have been certified as **"Fair Pay Developers"** for closing the gender pay gap. **Under Armour** conducts **annual reviews of pay equity** in the United States with the assistance of third-party experts to identify and close any gaps. **Adidas** tracks **"Gender Wage Parity"** at **strategic Tier 1 suppliers** as part of its supply chain monitoring.

- **Diverse Representation:** Beyond gender, companies are tracking racial and ethnic diversity. **Nike** specifically tracks and reports racial and ethnic diversity data to ensure diverse representation within its workforce. **Under Armour** utilizes Teammate Resource Groups to promote **cultural awareness** and networking, viewing **diversity as a critical success factor**.

Health and Safety Performance

Ensuring the physical and mental well-being of workers is a fundamental responsibility. This applies to both direct employees and workers in the supply chain, with a focus on preventing accidents and promoting healthy work environments.

- **Safety Targets and Performance:** **Puma** has a target of **zero fatal accidents** and aims to lower its average injury rate annually. In 2024, they achieved zero fatal work-related accidents and an injury rate of **0.44** for their own employees. **Adidas** also sets KPIs to minimize work-related incidents, recording zero fatalities and a lost time injury rate of **1.37** for their employees in 2024.

- **Supply Chain Safety:** Extending safety standards to suppliers is critical. **Nike** has a **target for 100% of strategic suppliers to build healthy and safe workplaces**, achieving **96%** compliance in FY24. **Puma** also tracks **safety in its supply chain**, reporting an average **injury rate of 0.2%** in its core Tier 1 factories in 2024.

- **Worker Well-being:** Companies are increasingly focusing on overall well-being. **Under Armour** emphasizes a **safe and healthy work environment** as part of its **human capital management strategy**. **Adidas** has implemented a **mental health compass** for employees and leaders to strengthen knowledge and awareness of mental health issues.

Human rights in supply chains

Managing human rights in the supply chain is a **major challenge** due to the reliance on outsourced manufacturing. Key issues include fair wages, freedom of association, and the elimination of forced and child labor.

- **Fair Compensation:** In Vietnam, **Adidas** participates in a pilot project led by the **Fair Labor Association** to assess and improve Adidas' responsible purchasing practices and **fair wage interventions** in a multi-buyer scenario. **Adidas** also tracks "Fair Compensation" at strategic suppliers. **Puma** has a target for all core **suppliers to pay a living wage** and tracks the percentage of workers earning a living wage at core Tier 1 factories.

- **Labor Rights and Standards:** **Under Armour** requires manufacturers to adhere to a **supplier code of conduct** regarding working conditions and social/labor matters. **Nike** monitors **compliance with its Code of Conduct across its extended supply** chain and has a target for 100% of strategic suppliers to measure and improve worker engagement, achieving **75%** in FY24.

- **Specific Interventions:** **Puma** focuses on **eliminating recruitment fees** for foreign migrant workers to mitigate forced labor risks. **Adidas** uses a **"Social Impact (S-KPI)" rating for suppliers**, with **82%** of key manufacturing facilities achieving a rating of 4S or better in 2024.

Community Engagement

Companies engage with communities to foster social impact, often linking these efforts to their core business values of sport and activity.

- **Employee Volunteering:** **Under Armour** encourages community engagement by **offering** full-time corporate teammates **40 hours** of paid time off annually for **volunteering**. **Puma** has a target of **500,000 hours** of community engagement donated by employees by 2030 and recorded nearly **44,000 hours** in 2024.

- **Strategic Initiatives:** **Adidas** runs the **"Move For The Planet" initiative**, which links physical activity to social impact by donating funds to make sports facilities more resilient and provide sustainability education. **Nike** considers **"Community Impact" a core pillar**, investing in programs to get kids active and build inclusive communities.

Governance

Typical governance structures in the industry

The sportswear industry displays a clear geographic divide in governance models, separating the American "one-tier" system from the European "two-tier" system.

Two-Tier System: As German SE companies, Adidas and Puma have a mandatory separation between the **Executive Board** (management) and the **Supervisory Board** (oversight). At **Adidas** The Supervisory Board includes employee representatives (co-determination), ensuring labor voices are integrated into high-level governance. **Puma** utilizes a Supervisory Board to monitor the Management Board, with specific focus on sustainability through a dedicated Sustainability Committee that reports directly to the board.

One-Tier System: Nike & Under Armour utilize a **single Board of Directors** responsible for both management oversight and strategic direction. At Nike, governance is managed through specialized committees, notably the Corporate Responsibility, Sustainability & Governance (CRS&G) Committee, which oversees climate, social impact, and diversity. Under Armour features a Governance and Sustainability Committee. A notable characteristic of UA's governance is the significant influence of its founder, Kevin Plank (President & CEO), which is common in "founder-led" athletic brands.

ESG disclosure practices and regulatory compliance

- **Global Frameworks:** All four brands align their reporting with the **GRI** (Global Reporting Initiative) and **SASB** (Sustainability Accounting Standards Board). This allows investors to compare "water-wicking" performance or "Scope 3 emissions" across the industry.

- **The CSRD Shift (European Influence)**: Adidas and Puma are currently leading in disclosure depth due to the **EU's Corporate Sustainability Reporting Directive** (CSRD). Their 2024/2025 reports are moving toward "Double Materiality," where they must report not just how ESG affects the company, but how the company affects the planet.

- **Assurance:** There is a trend toward "Limited Assurance" by major accounting firms. Nike's FY24 Sustainability Data and Adidas's Sustainability Statement are both verified by third-party auditors (PwC) to prevent greenwashing.

- **Climate-Specific Disclosure**: All four have adopted **TCFD** (Task Force on Climate-related Financial Disclosures) reporting, identifying financial risks related to climate change, such as supply chain disruptions in Southeast Asia due to extreme weather.

ESG-related compensation

ESG-related compensation across these four major athletic brands is increasingly structured around quantitative targets, with Adidas and Puma providing specific percentage weights for sustainability and social goals in their executive pay frameworks. Nike and Under Armour integrate these goals into their annual incentive scorecards.

Adidas has a highly transparent ESG-linked compensation structure, primarily integrated into its Long-Term Incentive Plan (LTIP). For the 2024–2026 performance period, 20% of the LTIP is measured against ESG criteria such as the reduction of carbon intensity per product, aligned with SBTi targets for 2030 and 2050, and the increased percentage of women in leadership positions globally (with a target of 50% by 2033.

Puma integrates sustainability directly into its annual bonus for Board members. Sustainability targets represent 10% of the total annual bonus. Puma has 3 targets and evaluates them in 2 categories: targets for its own operations and targets for its supply chain. The targets are: Climate Change, Human Rights, and Product/Circularity, each with a weight of 16.66%.

Players Comparison

ESG Scores

	Range	Adidas	Nike	Puma	Under Armour
Morningstar	0 - 100(lower = lower risk)	15.98	17.5	14.09	16.8
MSCI ESG Ratings	AAA (leader) - CCC (laggard)	AAA	BB	AAA	B
S&P Global CSA	0 - 100	44	37	75	—

Table 1: ESG Ratings x industry comparison.

Morningstar: Provides ESG risk ratings that measure a company's exposure to industry-specific ESG risks and how well they are managed.

MSCI ESG Ratings: Evaluates companies' ESG performance relative to its peers.

S&P Global CSA (Corporate Sustainability Assessment): Assesses companies' ESG practices through detailed questionnaires, used to determine inclusion in the Dow Jones Sustainability Index.

ESG KPIs

ESG Pillar	Key Performance Indicator	Year	Adidas	Nike	Puma	Under Armour
Enviromental (E)	**Scope 3 Emissions**	2023	Strategy focused on **material innovation** and value chain decarbonization.	Focus on **absolute reduction** in production and materials; "Move to Zero" initiative.	Focus on **science-based targets** for supply chain reduction; Strong implementation of *Clean by Design*.	Less developed strategy; Lags in integrating absolute reduction targets.
	Scope 1 & 2 Emissions	2023	Volatility	Rapid Acceleration	Leader	Lack of Transparency
	Water Management Strategy	2023	Focus on **Tier 2 Supplier Intensity** reduction; Active monitoring and water reuse programs.	Focus on **Restoration** and dyeing intensity reduction.	Focus on **Absolute Reduction Targets** per product	**Strategic and Disclosure Gap** (Withdrawal/Discharge metrics not reported); High water risk exposure.
	Circular Economy Approach	2023	**Material Innovation** (Parley partnership); Strong **recycled polyester** targets.	**Structural Circularity** (Move to Zero); **Reverse Logistics** (*Refurbished*); High use of recycled content.	**Proactive Design Policy** (Life Cycle Design); Designing for durability/recyclability.	**Strategic Gap** (No formal Life Cycle Design policy reported).
Social (S)	**Total Workforce**	Headcount / 2024	62035	79400	22214	14426
	Lost Time Incident Rate (LTIR)	2024 / Cases per 1,000,000 working hours	1.37	1.16	2.21	N/A
Governance (G)	**Board Type**	Governance models / 2024	Two-Tier	One-Tier	Two-Tier	One-Tier
	ESG-related compensation	Status /2024	Yes (Measured against ESG criteria)	Yes (ESG goals integrated into the annual incentive scorecard)	Yes (Linked to sustainability targets)	Yes (ESG goals integrated into the annual incentive scorecard)
	Responsible sourcing audit coverage	2024	PwC	PwC	KPMG AG	Registered Public Accounting Firm

Table 2: ESG Key Performance x industry comparison.

Outlook

For 2026, the sustainability outlook in the fashion industry shifts from being defined merely by voluntary commitments to being shaped by tangible regulatory pressure and the demand for circular business models. The most significant trend is the "Resale Sprint," where the secondhand market is forecast to grow two to three times faster than the first-hand market through 2027. This growth is not just economic but represents a structural shift in consumer behavior: around 60% of global consumers plan to shop secondhand in 2026, driven by both the search for value and sustainability motivations. Resale is cementing itself as an essential tool for extending product lifecycles and reducing the environmental impact associated with producing new items.

In parallel, the industry faces unprecedented legislative rigor focused on waste management and product end-of-life. Operational efficiency has become an environmental imperative under the theme "Efficiency Unlocked", as new legislation, such as the Ecodesign for Sustainable Products Regulation in the EU and the Responsible Textile Recovery Act in California will start to financially penalize unsold stock and impose responsibility for recycling. Excess inventory, which reached all-time highs in 2024, stops being just a working capital issue to become a risk of environmental and reputational compliance.

In the luxury and jewelry segment, sustainability is redefining the perception of value. We are witnessing a "Luxury Recalibrated", where rebuilding client trust depends intrinsically on responsibility within the supply chain. High-net-worth consumers, and especially younger generations, are demanding greater transparency, with ethics and sustainability emerging as decisive purchase factors. This movement is visible in the rise of lab-grown diamonds, expected to account for half of diamond jewelry unit sales by 2030, attracting consumers through a value proposition that combines accessibility with ethical and environmental concerns.

Roadmap & Recommendations

To ensure ESG resilience and future compliance, fashion companies must follow a roadmap that integrates circularity into the core of the business model and ensures value chain ethical integrity. The following points represent the roadmap:

1. Operationalize the Circular Economy

Brands must transition resale from a peripheral marketing initiative to a central commercial channel. Adopting "Resale-as-a-Service" models or developing internal platforms is recommended to allow brand control over the experience and capture value from end-of-life products. This strategy not only meets consumer demand but prepares brands for future Extended Producer Responsibility (EPR) legislation, mitigating fines and reinforcing the perception of product durability and quality.

2. Eliminate Waste through Technological Efficiency

To combat overproduction, one of the sector's biggest environmental problems, companies must prioritize artificial intelligence technologies and data analysis to optimize inventory management and demand forecasting. Implementing demand-driven strategies and on-demand production are essential to reduce obsolete stock before it becomes waste. Efficiency should be viewed as a sustainability tool, where reducing operational costs and waste frees up resources to invest in material innovation and cleaner processes.

3. Ensure Value Chain Integrity and Traceability

Rebuilding trust in the luxury and premium segment requires full responsibility over the supply chain. Brands must prioritize traceability from raw material to finished product, ensuring fair labor practices and ethical sourcing. This may imply direct investments in suppliers or vertical integration of critical artisanal skills to ensure social and environmental compliance. Transparency is not optional; it is the foundation for validating brand narratives around craftsmanship and quality to an increasingly skeptical consumer.

4. Align the Offering with Wellness and Ethical Values

Brands must authentically integrate sustainability principles into their product narratives, avoiding greenwashing. In the jewelry sector, for instance, a clear strategic approach for ethical materials, such as lab-grown diamonds, should be defined, transparently communicating their sustainability benefits. Globally, companies must ensure that their social and environmental impact initiatives align with the brand's central purpose, building credibility through long-term commitments and partnerships with sustainability experts.

Conclusion

In conclusion, the fashion industry, acts as a fundamental pillar of the global economy and a cultural engine, facing unique environmental, social, and governance challenges due to its high resource intensity and geographically dispersed global value chains. On the environmental front, the manufacturing of textiles and footwear consumes massive amounts of energy, water, and raw materials, resulting in a carbon footprint estimated to account for between 8% and 10% of global emissions. To mitigate this impact, the sector is transitioning toward circular economy models, focusing on the reduction of Scope 1, 2, and 3 emissions, material innovation, and the expansion of the resale market as a strategic sustainability tool.

In the social domain, the industry navigates a complex landscape where human rights, safe working conditions, and the elimination of forced labour in supply chains are critical imperatives. Simultaneously, there is a growing focus on diversity, equity, and inclusion, with specific targets established for gender balance in leadership and pay parity. At the governance level, the industry adopts models that ensure accountability through dedicated sustainability committees and the integration of ESG metrics into executive variable compensation, ensuring that transparency is validated by external audits.

These initiatives are increasingly driven by rigorous regulatory frameworks, such as the CSRD and CSDDD in Europe and new climate disclosure rules in the United States, which elevate sustainability from a matter of compliance to a core competitive differentiator. As global demand for fashion continues to rise, solid ESG performance becomes the primary determinant for access to capital, operational resilience, and sustainable business growth, aligning economic progress with global climate objectives.

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This report was prepared by the Equity Research team at the Lisbon Investment Society. Our analysts combine rigorous financial modeling, critical thinking, and collaborative research to deliver high-quality, student-led investment analysis.
We welcome your feedback, discussion, and questions regarding this report or our research process. Feel free to reach out to our team, we're always open to engagement.


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