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Leading with Impact: Champion Report from the PolyU SFT x PUMA Case Competition in Sustainability

July 2025

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ESG Research and Sustainable Hub

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Abstract

This study explores consumer perceptions and strategic opportunities within the sustainable sports footwear market, with a focus on PUMA's positioning relative to Adidas. Quantitative analysis reveals gaps in brand familiarity, purchase intention, and emotional connection, highlighting areas where PUMA trails behind. However, when sustainability narratives are introduced, PUMA demonstrates potential to reshape brand perception — nearly doubling positive sentiment and increasing purchase willingness among consumers. Despite growing eco-awareness, key challenges persist: product durability concerns, limited post-wash performance, and low visibility of sustainability efforts. To address these, the report proposes a dual-strategy approach combining a circular service ecosystem (including repairs, take-back programs, and eco-friendly cleaning solutions) with data-driven storytelling across social platforms. The business model innovation — centered on the value proposition *"Trends May Fade, But Durability Stays"* — targets Gen Z and Millennials and leverages hybrid engagement channels to drive loyalty and differentiation. Ultimately, this strategy positions PUMA as a category leader in sustainable footwear innovation, delivering both environmental impact and long-term brand equity growth.

1. Introduction

As a global sports brand, PUMA has been committed to promoting sustainable development. However, preliminary research reveals limited resonance of these efforts among Hong Kong consumers. This study aims to quantify Hong Kong consumers' perceptions of PUMA's sustainable products (e.g. RE: SUEDE), identify perception gaps and behavioural barriers, and explore value-shifting strategies based on the local culture to transform sustainable innovation into meaningful brand equity.

2. Consumer Research Study

To address the outlined challenges, we conducted a structured consumer research study in Hong Kong, organized as follows:

2.1. Benchmark Selection Rationale

Due to their shared origin in the Dassler family legacy and significant market overlap, Adidas was selected as the strategic benchmark. This comparative framework enables:

- Clear identification of PUMA's differentiators in sustainability perception
- Detailed mapping of overlapping consumer pain points across both brands
- Extraction of actionable insights for hyper-targeted strategy formulation

2.2. Survey Framework

The study was structured into six components:

- Part 1: Demographic Information
- Part 2: Brand Perception and Attitudes
- Part 3: Purchase Motivation and Concerns
- Part 4: Sustainability Awareness and Habits
- Part 5: Introduction of Sustainable Sport Shoes (PUMA RE:COLLECTION and Adidas x Parley)

- Part 6: Feedback and Suggestions

2.3. Data Collection and Analysis Tools

The study yielded 106 validated responses through stratified sampling (Figure 1). Data was collected using Google Forms via a structured questionnaire, followed by systematic organization and preliminary analysis in Excel. To ensure methodological rigor and insight accuracy, advanced statistical validation was conducted in SPSS, allowing for robust, actionable insight generation.

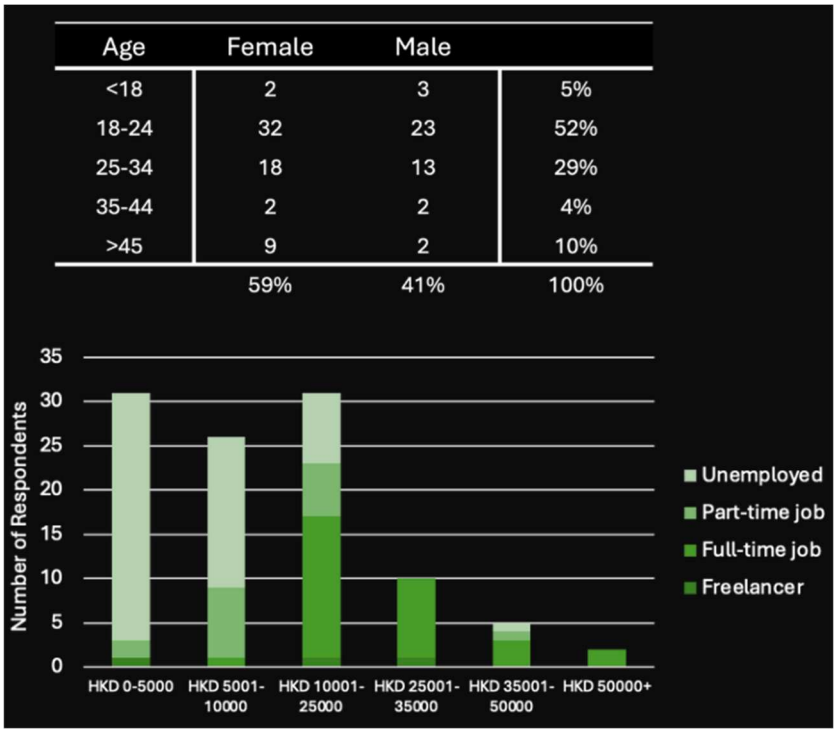

Figure 1. Demographic Analysis

3. Key Findings in the Sports Footwear Segment

3.1. Addressing the Awareness-to-Purchase Gap

In *Comparison about Brands Familiarity and Purchase Intention* (Figure 2), the independent samples t-test revealed that there is a significant difference in brand familiarity between PUMA and Adidas ($t=-6.052$, $p<0.001$). Brand familiarity of Adidas

(M=3.77) is significantly higher than that of PUMA (M=3.06), indicating that consumers have stronger brand awareness and memory of Adidas.

Similarly, a significant difference in purchase intention was found between PUMA and Adidas ($t = -7.061$, $p < 0.001$). The mean value of purchase intention for Adidas (M=3.66) is significantly higher than that for PUMA (M=2.82), suggesting that consumers preferred Adidas over PUMA. The very low p-value ($p = 0.000$) further confirms the reliability and statistical significance of these findings.

	Brand	M	t	p
Familiarity	PUMA Adidas	3.06 3.77	-6.052	0.000
Purchase Intention	PUMA Adidas	2.82 3.66	-7.061	0.000

Figure 2. Comparison about Brands Familiarity and Purchase Intention

Despite the existing familiarity gap (3.06 vs. 3.77), the disparity in purchase intention is even more pronounced (2.82 vs. 3.66). This indicates a critical disconnect between consumer awareness and actual purchasing behavior. PUMA must prioritize enhancing its product value perception to close this gap — transforming awareness into concrete, purchase-driven engagement.

3.2. Reinvigorating Brand Image

Brand image data also reveals a substantial gap in consumer perceptions between Adidas and PUMA. As shown in Figure 3 (*Comparison about Brands Image*), the most striking difference lies in the high-intensity "Very Positive" ratings — Adidas exceeds PUMA by more than 10-fold — indicating that PUMA's current brand image remains largely neutral or passively accepted. This lack of emotional resonance suggests that consumers do not yet have strong affective connections with the PUMA brand.

To build deeper engagement, PUMA must focus on crafting a more aspirational, emotionally compelling brand narrative that resonates with the values and identity of its target consumers.

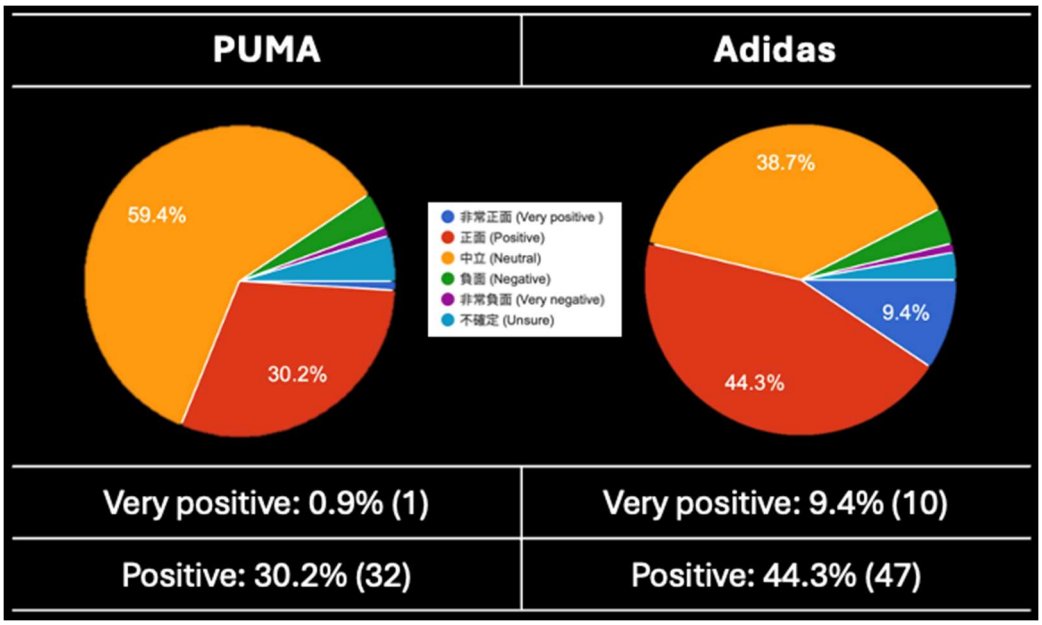

Figure 3. Comparison about Brands Image

3.3. Understanding Purchase Drivers

Consumer research reveals that comfort is widely perceived as a foundational expectation, while Price and Design Style act as the primary decision-making triggers when it comes to sport footwear.

Data analysis in Figure 4 (*Driver Factors Ranking*) indicates a clear hierarchy in product attribute prioritization among consumers: Comfort > Price > Design Style > Brand Recognition > Functionality > Durability > Environmental Image

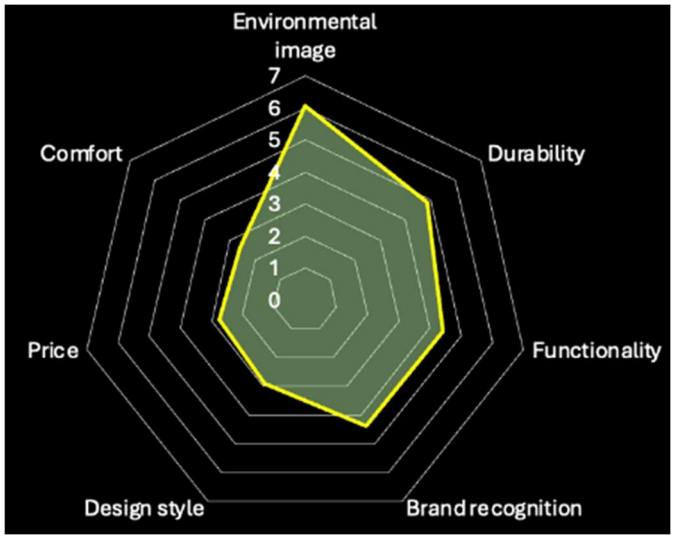

Figure 4. Driver Factors Ranking

However, purchasing decisions display a notable contradiction — while Comfort ranks highest in perceived importance, it is not the most cited factor influencing actual purchase decisions:

- 33% of consumers selected Price as their top priority
- 28% chose Design Style
- Only 24% cited Comfort as their primary driver

This mismatch between fundamental expectations and actual purchase drivers reflects a latent tension in consumer psychology. It also underscores strategic opportunities for product positioning — namely, upholding baseline experiential standards while enhancing brand appeal through competitive pricing and distinctive, innovative design.

4. Consumer Insights in Sustainable Fashion

Consumer self-assessments indicate a moderate yet incomplete adoption of sustainable habits. As illustrated in *Environmental Self-Perception* (Figure 5), nearly 80% of respondents rate their environmental efforts between 3 and 4 out of 5, while only 8.5% consider themselves fully compliant.

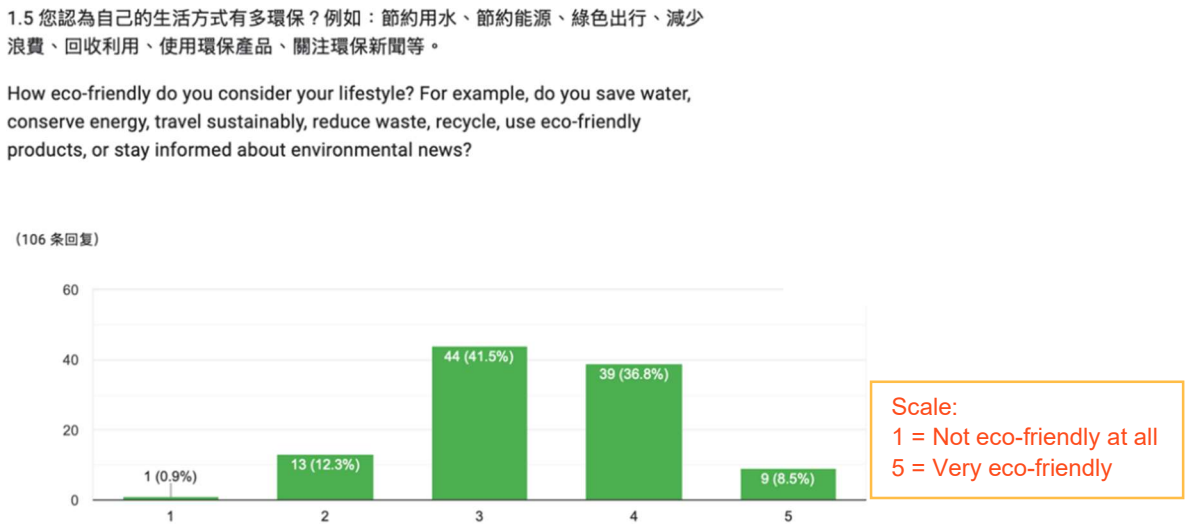

Figure 5. Environmental Self-Perception

Sustainable Fashion Awareness (Figure 6) further shows that although 53.8% recognize sustainable fashion as environmentally important (rating ⩾ 4), a substantial portion of the market remains unconvinced or disengaged — underscoring the need for stronger consumer education and more compelling value communication.

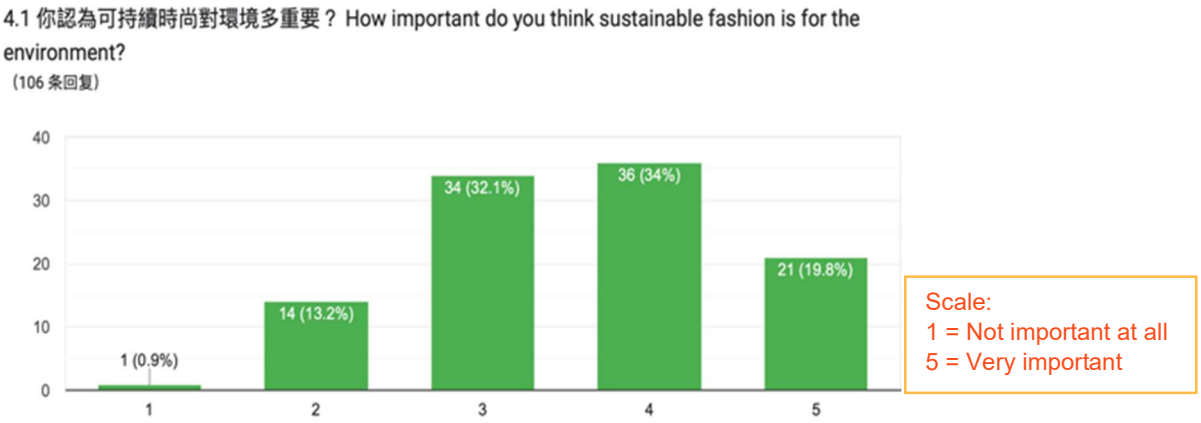

Figure 6. Sustainable Fashion Awareness

In Figure 7 (*Pro-Environmental Belief*), approximately 74.5% of consumers agree that purchasing sustainable products contributes to environmental sustainability, reflecting well-established eco-consumption values.

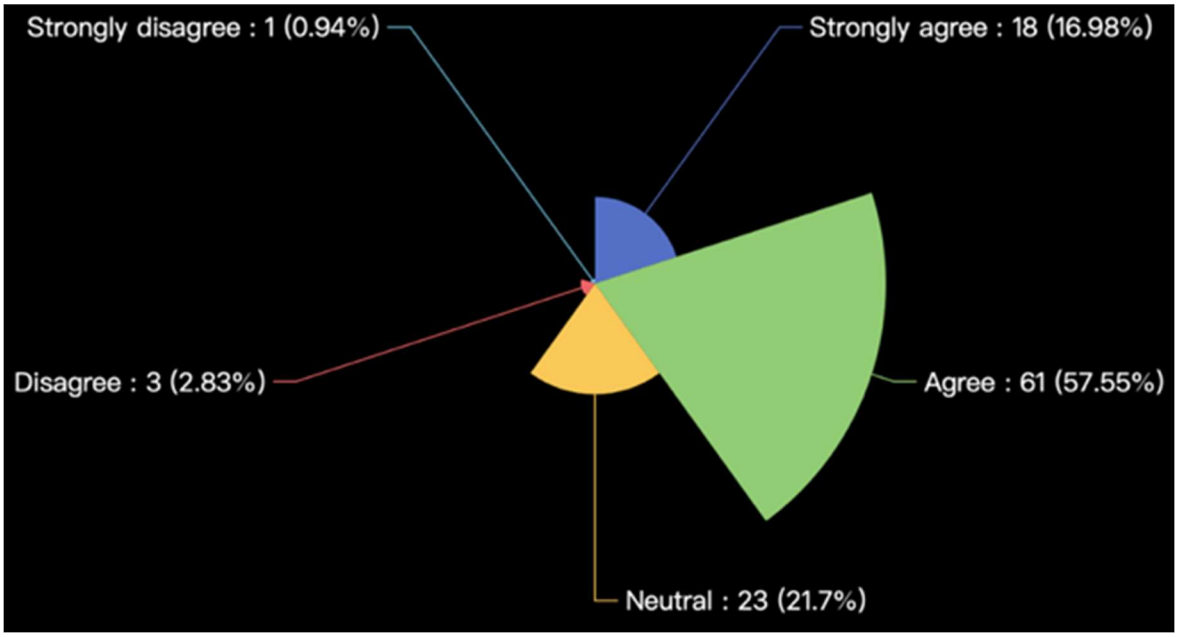

Figure 7. Pro-Environmental Belief

However, Figure 8 (*Limited Brand Influence*) indicates that brands' limited actions on sustainability have not yet significantly influenced consumers' willingness to purchase ($p > 0.05$), suggesting that sustainability currently plays a peripheral role in motivating buying behavior.

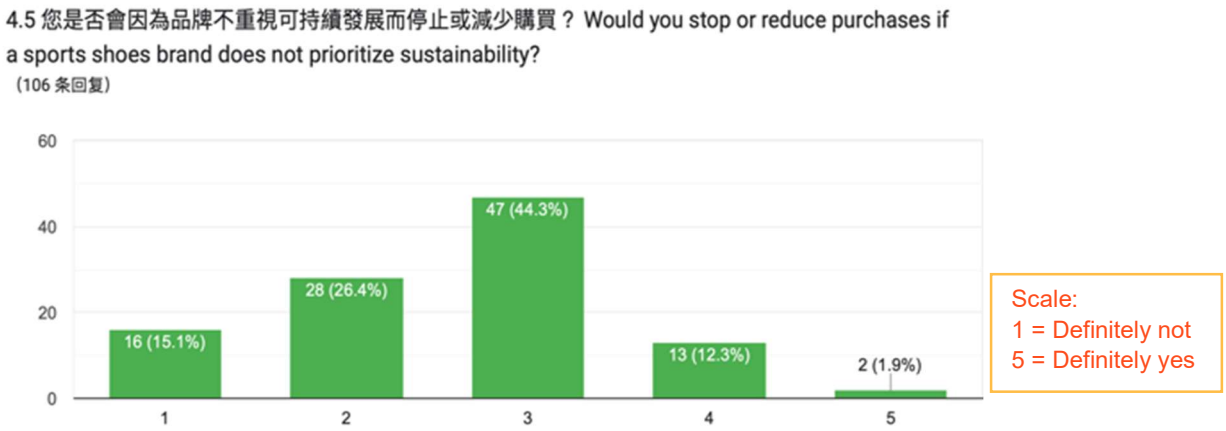

Figure 8. Limited Brand Influence

Figure 9 (*Sustainability Premiums*) illustrates that price remains a significant barrier: 50% of respondents are only willing to accept a 1–10% premium for sustainable products, while 30% are unwilling to pay any additional cost.

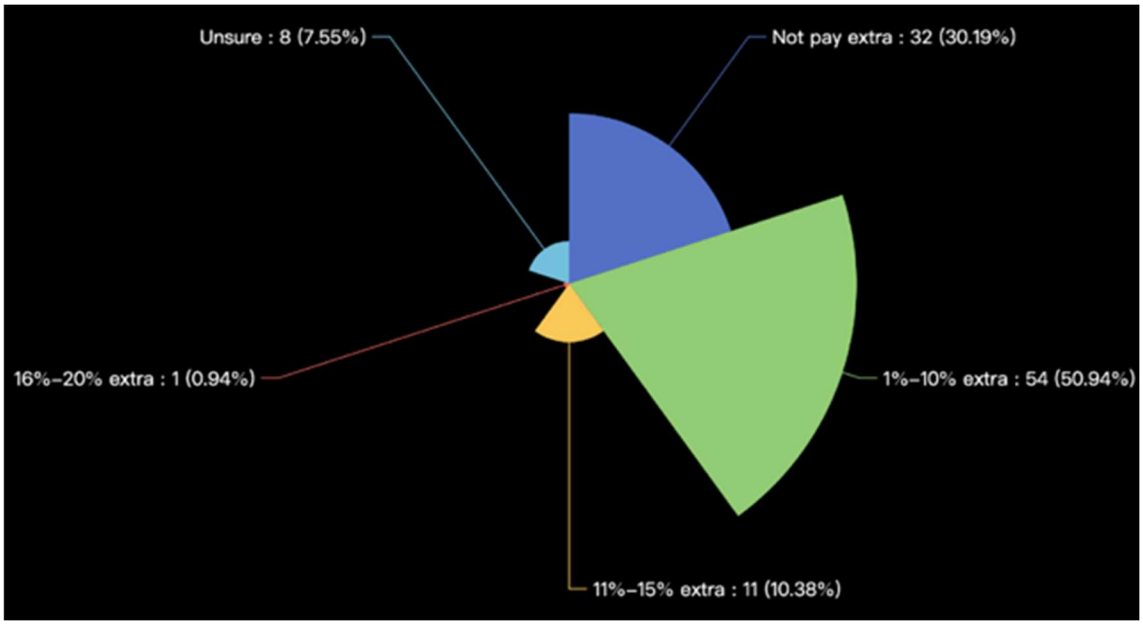

Figure 9. Sustainability Premiums

Consequently, as shown in Figure 10 (*Sustainable Fashion Purchase Intention*), uptake of sustainable fashion remains limited – with only 25% frequently considering such products in their purchasing behavior. This disconnect between positive attitudes and actual engagement underscores a persistent intention – action gap.

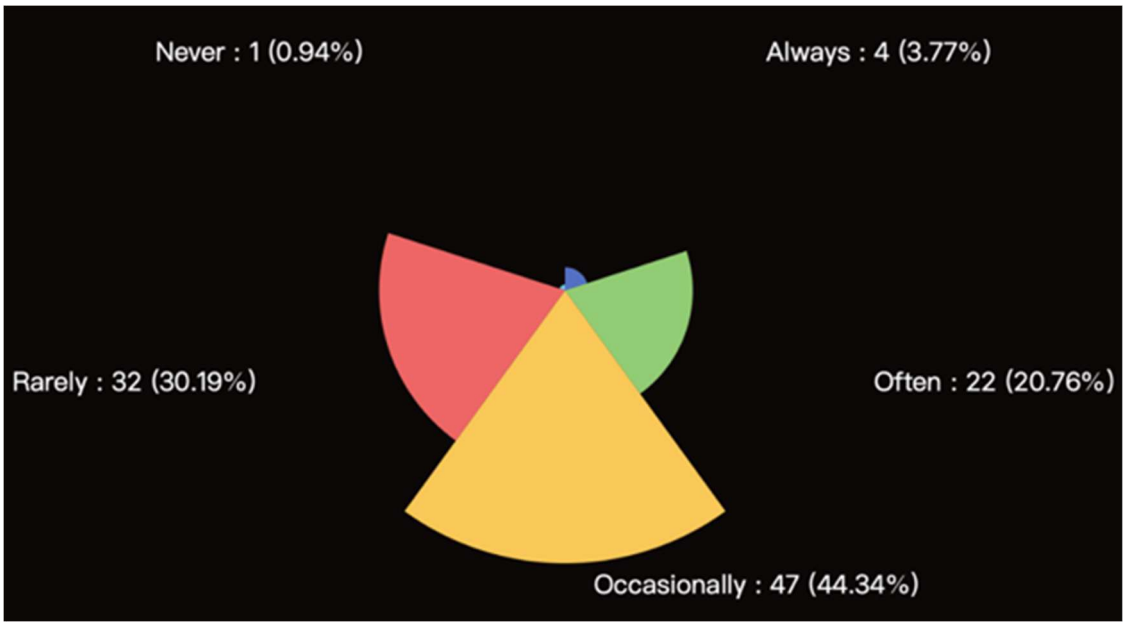

Figure 10. Sustainable Fashion Purchase Intention

As shown in Figure 11 (*Consumers' Opinion about Sustainable Fashion*), consumer perception analysis reveals a nuanced segmentation: 40.7% of supporters believe that sustainability and social responsibility represent the future of fashion, while emphasizing the importance of balancing design innovation with practical usability. Meanwhile, 29.1% of neutral consumers exhibit price sensitivity, resisting eco-premium pricing due to either cost concerns or limited sustainability literacy. Notably, 16.3% of skeptics question the durability of sustainable products, criticizing design limitations and favoring functional performance over environmental commitments. The remaining 13.9% represent untapped potential — consumers whose hesitation stems from limited market awareness and a need for more robust sustainability education initiatives.

Supporters 40.7%	'trend' , 'social responsibility' or 'there is a need to **balance design and practicality**'
Neutral 29.1%	**'price sensitivity'**, 'unwillingness to pay a premium for environmental protection' or 'lack of information'
Negative 16.3%	**'doubt the durability'**, 'design constraints' or 'functionality over environmental protection'
Those who did not know enough 13.9%	**'no knowledge'** and 'not enough publicity', 'need market education'

Figure 11. Consumers' Opinion about Sustainable Fashion

5. Consumer Insights in Sustainable Sports Shoes

Currently, sports brands are generally launching eco-friendly product lines, but consumers' perceptions of sustainability vary significantly. These include blind spots such as equating environmental protection with material recycling while ignoring the retention of technical performance, a crisis of trust in the authenticity of green marketing, and the conflict between high performance and environmental protection in decision-making.

This study used a competitive product comparison experiment method to present two sets of information to the same group of respondents (N=106). PUMA RE:COLLECTION materials (technical documentation + product image) emphasized quantitative recycling metrics (20%-100%), retention of dryCELL® moisture-wicking technology, and the 2025 goal of 75% recycled polyester; Adidas x Parley materials highlighted ocean plastic narratives (fishing net mortality data), Parley Ocean Plastic® supply chain innovation, and mass production since 2017. All participants completed three unified assessments: sustainability perception, sustainability purchase intention, and brand image impact.

Figure 12. Sustainable Sport Shoes Cases

After introducing the specific sustainable sport shoes, the independent samples t-test revealed no significant differences in sustainability perception or purchase intention variance between PUMA and Adidas. Likewise, paired samples t-tests comparing pre- and post-exposure purchase intentions showed minimal variance — indicating that current sustainability narratives in this product category do not yet meaningfully influence consumer decision-making.

	Brand	M	t	p
Sustainability perception	PUMA Adidas	3.68 3.73	-0.426	0.670
Sustainability Purchase Intention	PUMA Adidas	3.01 3.15	-1.123	0.263

Figure 13. Sustainability Perception & Sustainability Purchase Intention

Brand	Variable	M	t	p
PUMA	purchase intention sustainable purchase intention	2.82 3.01	-1.73	0.086
Adidas	purchase intention sustainable purchase intention	3.66 3.15	4.47	0.000

Figure 14. Pre-Purchase Intention & Sustainability Purchase Intention

When examining consumer preferences, distinct brand-associated rationales emerged:

Brand	Consumer Preferences
PUMA	- Wider range of recycled materials. - More data on what seems to be reliable. - Made from recycled materials and retaining the moisture wicking properties of dry CELL technology.
Adidas	- Protecting marine animals is a little warmer. - Marine litter is a serious problem. - Co-operation with environmental organization. - It seems more in touch with this eco-friendly theme.

PUMA's sustainability messaging had a marked effect on brand perception. As shown in *Brand Image Post-Introduction* (Figure 15), the proportion of "Very Positive" ratings surged nearly sevenfold, while overall positive sentiment rose from 31.1% to 59.8% — signaling a successful emotional breakthrough in brand image. In contrast, Adidas' brand image remained largely unchanged, highlighting PUMA's advantage in engaging consumers through impactful storytelling.

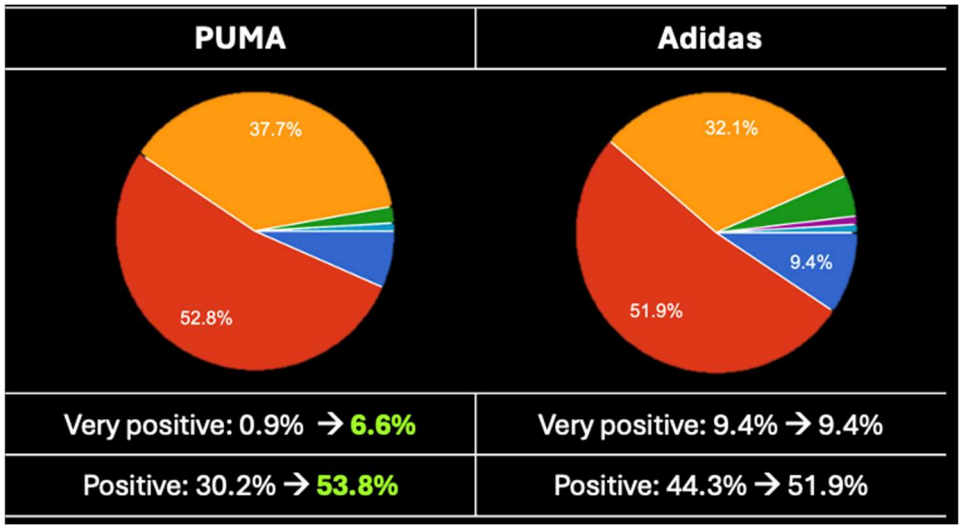

Figure 15. Brand Image Post-Introduction

Additionally, sustainability communication positively influenced purchase willingness. As presented in *Post-Introduction Purchase Willingness* (Figure 16), 70.8% of respondents reported an increased likelihood of purchasing from the featured brands, with 6.6% citing a strong increase and 64.2% noting a slight increase. This underscores the potential for sustainability narratives to enhance brand appeal and drive consumer interest.

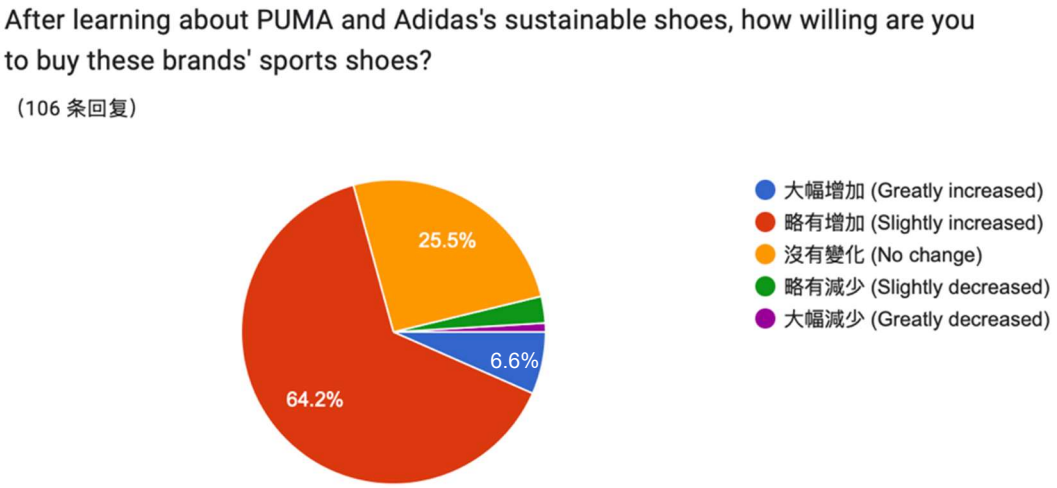

Figure 16. Post-Introduction Purchase Willingness

5.1. Consumer Suggestions for Strengthening Sustainable Strategies

Analysis of open-ended feedback yielded several actionable themes:

Focus Area	Representative Comments
Material Selection & Recycling	- Using recyclable materials - Reducing material losses
Transparency & Communication	- Publicizing carbon footprints - Explaining how recycled materials can protect the environment
Marketing strategy	- Enhance promotion of sustainable products - Combine with KOL or celebrity endorsement

Packaging Improvement	- Avoid over-packaging - Use recycled packaging materials
Balancing Design and Function	- Being green doesn't mean sacrificing aesthetics - Design needs to be in line with fashion
Price and incentives	- Discounts on eco-products - Subsidies for new and used products
Performance and Durability	- Prove that eco-friendly materials don't compromise comfort - Offer long warranties

To strengthen its market positioning in Hong Kong, PUMA should prioritize elevating brand awareness through increased visibility and distinctive sustainability storytelling. It should also boost purchase intent through immersive product experiences and micro-influencer partnerships, while rejuvenating brand perception by embedding emotionally resonant narratives that reflect the eco-conscious aspirations of local consumers.

6. Strategic Recommendations for PUMA

Building on the analysis of target customers and sustainable sneaker trends, three critical challenges facing environmentally conscious consumers — particularly Gen Z and Millennials — have been identified in the sustainable footwear market:

- Short product lifespans due to wear and tear
- Post-wash deterioration and fading
- Limited access to transparent sustainability information

To effectively address these pain points, PUMA should implement a comprehensive dual-strategy approach that combines product lifecycle extension with data-driven sustainability communication, as illustrated by the Value Proposition Canvas (VPC).

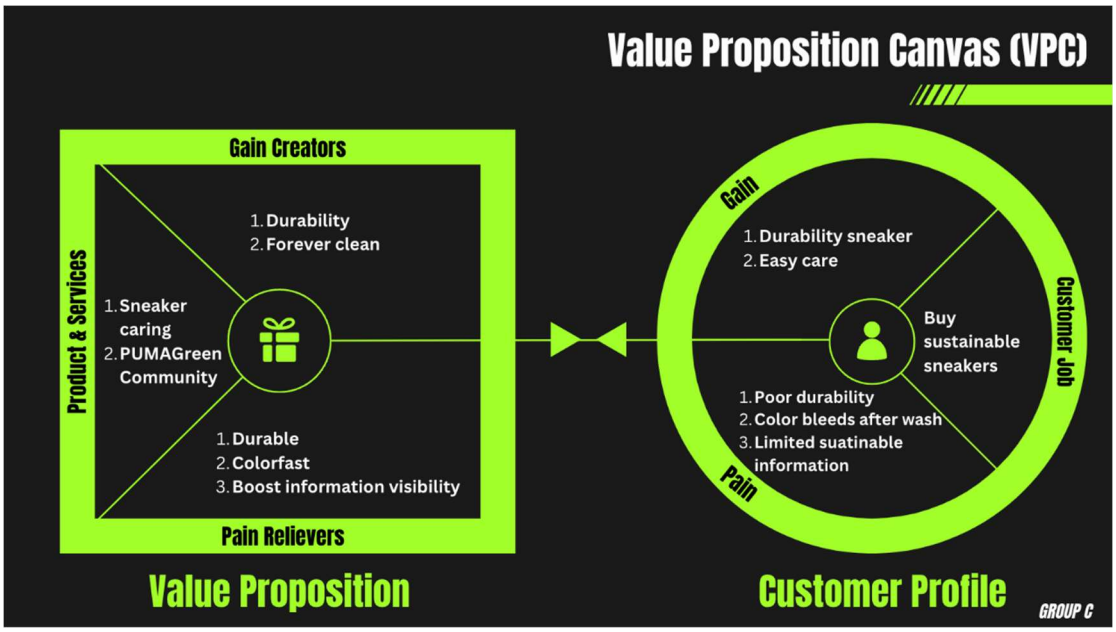

Figure 17. Value Proposition Canvas (VPC)

Strategic Pillar 1: Establishing a Circular Service Ecosystem

To promote product longevity and reduce waste, PUMA should launch a circular service ecosystem, as illustrated in the above VPC (Figure 17), encompassing the following elements:

- **Repair and maintenance services** via partnerships with cobblers and in-store technicians to restore worn footwear
- **Take-back and upcycling programs** that offer incentives — such as discounts — for returning used shoes for refurbishment or recycling
- **Eco-conscious cleaning solutions** designed to protect color and material integrity during care

Additionally, the introduction of eco-conscious cleaning solutions would help prevent color bleeding and material degradation during maintenance. Industry research from the Ellen MacArthur Foundation (2022a) suggests that such initiatives could reduce per-unit production costs by approximately 20% while simultaneously transforming PUMA's brand perception from fast-fashion participant to a leader in durability.

Strategic Pillar 2: Enhancing Sustainability Communication

To build trust and deepen brand-consumer engagement, PUMA should develop a “PUMAGreen” digital hub on social media platforms such as Instagram and Threads — the most popular channels among its target audience. This hub would:

- Share sustainability data (e.g., material usage, carbon impact) in engaging visual formats
- Spotlight behind-the-scenes production stories
- Host user-generated campaigns like #PUMARepair, where consumers showcase their shoe care efforts and refurbishment stories
- Collaborate with KOLs, celebrities, and athletes to deliver authentic, behind-the-scenes content

While PUMA maintains a dedicated website to showcase its sustainability reports and content, consumers rarely seek it out proactively — limiting its visibility and impact. By shifting this information into high-engagement platforms, the proposed strategy can significantly enhance its appeal and maximize the value of these existing efforts.

Business Model Innovation

PUMA's business model innovation should focus on Gen Z and Millennial consumers, who often undervalue the brand's sustainability efforts. As mapped in Figure 18 (*Business Model Canvas*), the proposed value proposition — *"Trends May Fade, But Durability Stays"* — effectively blends contemporary style with measurable environmental impact. Implementation would span hybrid engagement channels, including cleaning services partner, e-commerce platforms, and strategic influencer collaborations. Revenue streams could encompass products sales as well as long-term gains in brand equity driven by sustainability leadership.

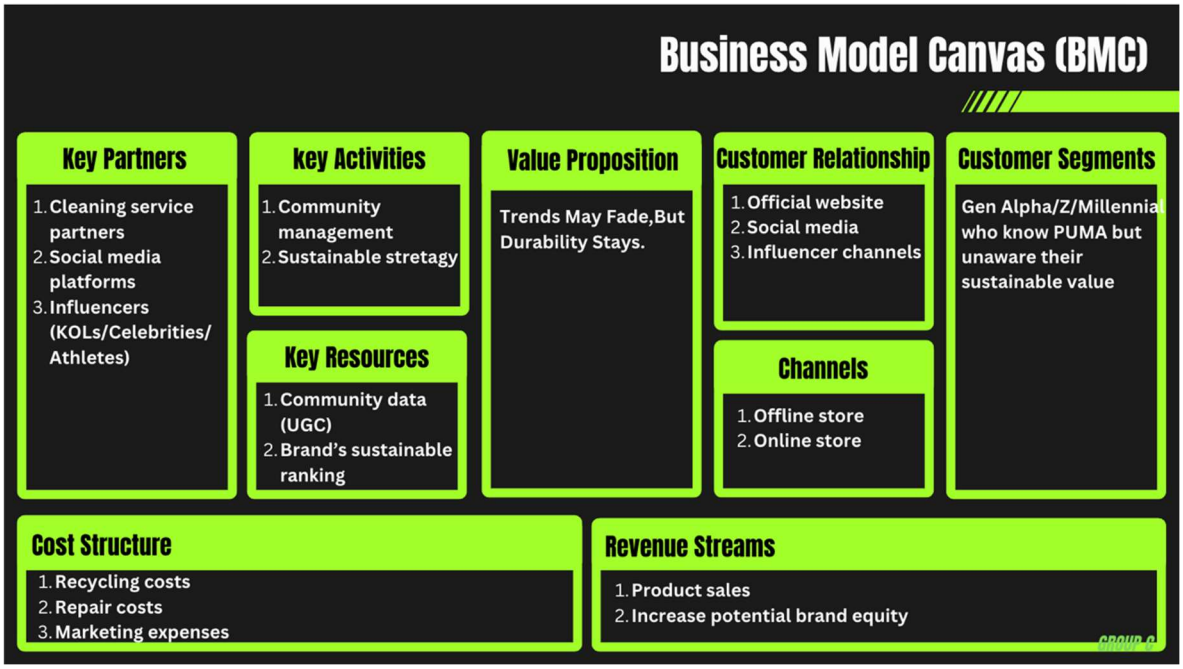

Figure 18. Business Model Canvas (BMC)

This strategy offers PUMA several competitive advantages in the marketplace. As visualized in Figure 19 (*Product Lifecycle Development after Recommendation*), its cost-efficiency in extending product lifespans aligns with McKinsey's (2023) findings on waste reduction and cost savings.

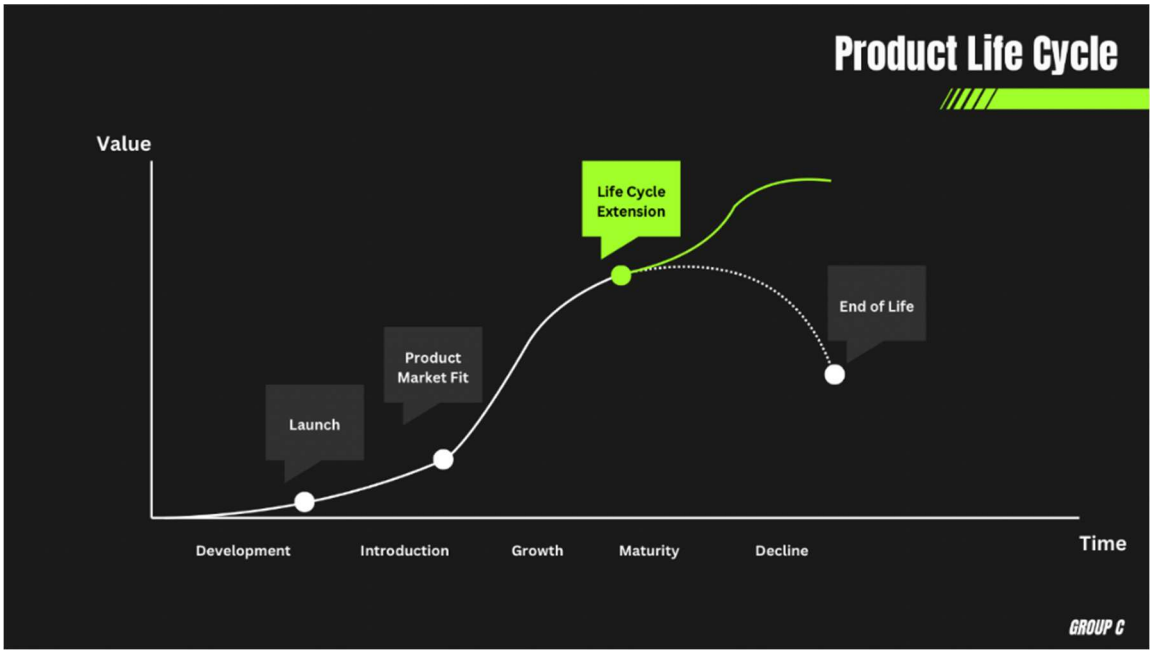

Figure 19. Product Lifecycle Development after Recommendation

More importantly, Figure 20 (*Competitive Differentiation Canvas*) illustrates how this approach uniquely positions PUMA by pioneering “footwear care as a service” — a concept that addresses currently unmet consumer needs while clearly differentiating the brand from competitors such as Adidas.

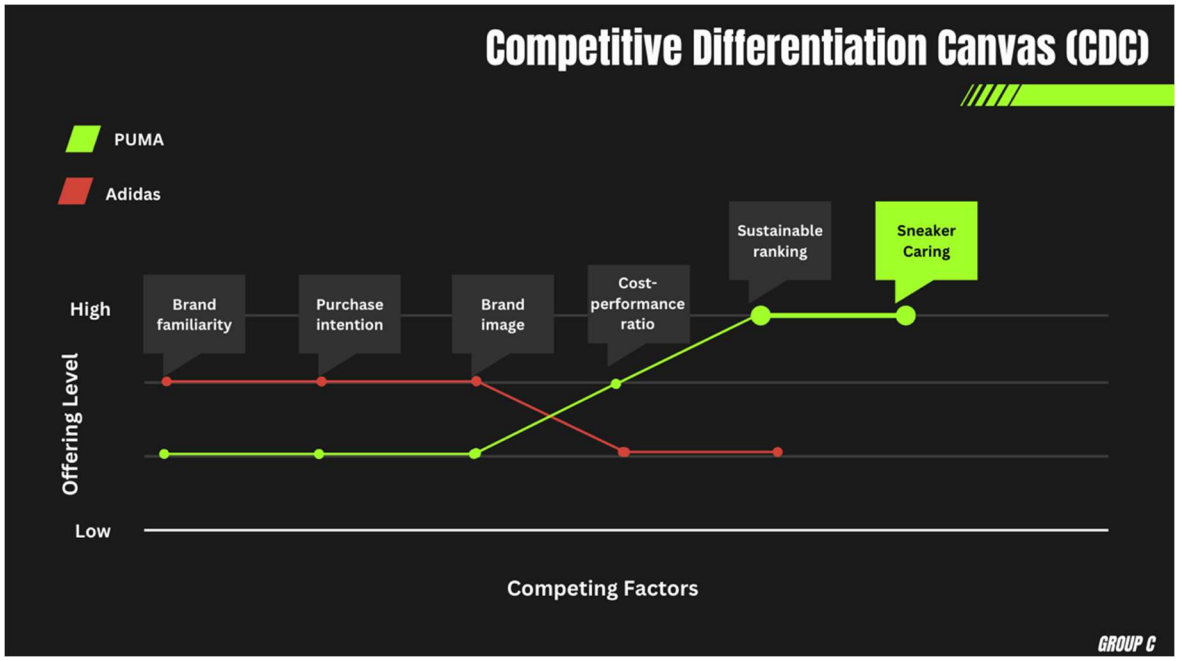

Figure 20. Competitive Differentiation Canvas (CDC)

The loyalty potential is also noteworthy: McKinsey and NielsenIQ (2023) found that high-ESG brands achieve 32–34% repeat rates, indicating broad consumer appeal. Notably, Nielsen (2021) identified Gen Z as a key accelerator of this trend, with 72% actively favoring sustainable brands — signaling future market shifts (Bar Am et al., 2023).

Moreover, circular strategies align with systemic shifts in policy and infrastructure. The Foundation (2022b) highlights Extended Producer Responsibility (EPR) as a critical enabler for scaling collection and recycling systems, reducing dependence on virgin materials while mitigating supply chain volatility.

Beyond operational benefits, the strategy’s most transformative impact lies in brand equity: as PUMA becomes increasingly associated with durability, it effectively embeds sustainability into the brand’s core identity.

7. Conclusion

In conclusion, by strategically integrating circular service offerings with transparent, emotionally resonant storytelling, PUMA can successfully convert eco-conscious consumers into loyal brand advocates. This dual approach not only reduces environmental impact and drives profitability but also strengthens consumer trust and brand distinctiveness. With these initiatives, PUMA is well-positioned to lead the sustainable footwear movement and redefine industry standards through innovation, authenticity, and long-term value creation.

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