

Article

Strategic Management—Ferrari Strategy Report

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Abstract: Ferrari's "Green Scarcity" strategy addresses EU emissions regulations (2035 ICE ban) and Gen Z sustainability demands by integrating exclusivity with carbon neutrality. The approach features limited-edition BEVs (≤ 500 units/year from 2025) with carbon-fiber integration ($< 1.5t$, $> 600km$ range), priced 20% above ICE models with carbon-neutral optional packages (+5%). It establishes a closed-loop supply chain via a "Zero-Carbon Tech Alliance" mandating 100% core supplier ISO 14064 certification by 2026, while enhancing customer value through carbon-footprint tracking. Leveraging F1 lightweight technology and projected €500M annual revenue, Ferrari targets an ESG upgrade (BBB→A by 2027) to balance heritage with sustainable innovation.

Keywords: electrification transition; circular supply chain; sustainable exclusivity

1. Introduction

Ferrari is facing mounting pressure from stricter environmental regulations, shifting customer expectations, and the need to reduce emissions across its supply chain—all while staying true to its legendary focus on performance. One promising path forward is a "Green Scarcity" strategy, which would position sustainability as a new dimension of Ferrari's brand positioning.

The plan would center on three pillars: crafting limited-edition electric models that still deliver the thrill of a Ferrari drive, forging partnerships with environmentally responsible suppliers, and building internal programs that reward green innovation.

With this approach, Ferrari can not only comply with emerging environmental standards but also sharpen its brand edge. By embracing sustainability without compromising its signature luxury and performance, Ferrari has the opportunity to lead the luxury car industry toward a greener future—while remaining true to the spirit that defines the brand.

2. Problem Diagnosis

Against the backdrop of an accelerating global trend towards carbon neutrality and growing environmental regulatory pressures, Ferrari is facing a profound strategic challenge. The issue is not only about powertrain and technology transitions, but also about fundamentally redefining brand value, customer perception, and organizational capability. Through PESTEL analysis, value chain analysis and SWOT analysis, the core dilemma of Ferrari can be identified more comprehensively.

2.1. PESTEL Analysis

From the PESTEL analysis, the EU's environmental legislation requires a total ban on the sale of fuel cars by 2035, and even though Ferrari, as a small manufacturer, can apply for an exemption in the short term, it will inevitably need to realize a zero-emission transition in the long term [1]. Meanwhile, consumers, especially Gen Z, are placing rising importance on sustainability performance. Recent industry studies indicate that more

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than 70% of young luxury consumers say a brand's sustainability influences their purchasing decisions. [2]. In the technological dimension, the performance of electric vehicles is rapidly increasing, with the development of high energy density batteries, lightweight materials and sound-imitating technologies opening up new possibilities for electric high-performance sports cars [3]. Together, these changes in the external environment are driving the need for Ferrari to proactively address electrification and the transition to carbon neutrality.

2.2. Value Chain Analysis

A value chain analysis reveals that Ferrari's green transition faces significant internal execution challenges. The company relies heavily on a niche, customized supplier base that often lacks the capital and technology required for a green manufacturing transition, making Scope 3 emissions control difficult [4]. In the production chain, the push for green supply chain management and sustainable material adoption will increase the complexity and cost of the production process, which in turn will lengthen lead times and potentially pose a risk to the brand's standards of workmanship and customer experience. If green materials fall short of the perceived standards of Ferrari's traditional craftsmanship, it may gradually weaken customers' emotional connection with the brand and have a negative impact on its reputation.

2.3. SWOT Analysis

Based on SWOT model, Ferrari possesses strong brand equity, superior customization capability and leading track technology accumulation. However, its electrification layout is relatively lagging behind and the Scope 3 emission control system is not yet complete. In terms of external opportunities, young consumers' preference for sustainable luxuries provides new growth space for Ferrari, but emerging EV brands such as Lucid and Rimac are also rapidly seizing the premium market share, which is a growing threat.

To sum up, the core challenge of Ferrari's current strategy is how to realize the strategic transformation of electrification and sustainability without sacrificing the brand's uniqueness under the multiple driving forces of regulatory pressures, technological innovations, and shifting customer values.

3. Strategic Solution

Based on the critical challenges identified in the problem diagnosis, this proposal centers on the guiding principle of "Green Scarcity." By deeply integrating carbon neutrality into the brand's DNA through technological leverage, ecosystem collaboration, and value reconstruction, Ferrari aims to build a sustainable competitive advantage.

3.1. Product Improvement

Green Scarcity transforms environmental responsibility into a new dimension of brand exclusivity, helping Ferrari avoid undifferentiated competition with traditional automakers in the EV market. Three principles are critical:

- 1) **Brand Value Prioritization:** All technological iterations and product designs must reinforce the brand's DNA of "extreme performance + artistic aesthetics." For example, leveraging lightweight and energy-efficient technologies accumulated from Formula 1 to develop powertrains that balance high performance with low-carbon attributes, ensuring electrification does not compromise driving experience.
- 2) **Closed-Loop Ecosystem Development:** Converting Scope 3 emission reduction pressures into value chain control through deep supplier collaboration and circular economy models; Establishing a "Zero-Carbon Technology Alliance" with core suppliers to co-develop low-carbon aluminum and bio-based composite

materials, while creating a battery recycling system to repurpose retired batteries into energy storage devices or art installations embedded into the brand experience ecosystem [5].

- 3) Customer Value Elevation: Elevating carbon neutrality from a compliance requirement to a distinguishing symbol of customer values.; Launching a limited-edition pure electric hypercar (e.g., "Ferrari E-superspeed") with full lifecycle carbon footprint tracking and a "Carbon Neutral Certification" digital badge; Enabling owners to offset emissions through participation in clean energy projects, while collaborating with premium environmental organizations to host carbon credit racing events, transforming eco-conscious actions into exclusive social capital.

3.2. Supply Chain and Customer Management

The company needs to coordinate actions and support feasibility. At the operational level, eyes should be placed on supply chain. The first all-electric model launched in 2025 should maintain scarcity through limited production (annual output ≤ 500 units), using a carbon fiber-battery integrated structure to achieve a vehicle weight < 1.5 tons and a range > 600 kilometers, with performance comparable to LaFerrari models. The price should be 20% lower than that of gasoline models, targeting high-net-worth individuals in Gen Z. A "carbon neutrality optional package" will be available, allowing customers to pay an additional 5% for carbon offsetting and receive customized eco-friendly interiors. This move not only increases the unit price but also reinforces the brand's sustainable identity. Furthermore, to address the core bottleneck of weak green capabilities among suppliers, a tiered management system will be implemented. Small and medium-sized suppliers will receive green transformation funds and technical support, with certification costs shared through relevant environmental tax policies in the EU [6].

3.3. Financial Planning

Finally, on the financial front, if limited-edition electric models achieve an annual sales volume of 500 units at a price point of €1 million, they can generate €0.5 billion in revenue. In terms of market, McKinsey research shows that 83% of global high-net-worth individuals are willing to pay a premium for sustainable luxury goods, which aligns closely with Ferrari's customer base. On the supply chain side, EU policy incentives and local recycling networks can reduce transformation barriers. Organizationally, the F1 technical team and lightweighting expertise provide foundational support for electrification, while incremental cultural changes can balance innovation and tradition.

4. Coherent Actions

4.1. Product Level

Firstly, limited electric vehicles should be promoted. Ferrari plans to launch a limited edition all-electric supercar (such as "Ferrari E-Scuderia") in 2025, with annual production lower than 500 units. The model should adopt an integrated design of carbon fiber and battery to ensure a weight under 1.5 tons and a range of more than 600 kilometers, delivering performance like LaFerrari. For example, the combination of carbon materials and lithium-ion batteries has great advantages in vehicle model, such as electrochemical stability, mechanical strength, long life, electron transport and small volume expansion [7]. Furthermore, pricing should be 20% higher than traditional gasoline models to attract the young customers.

Secondly, EV design aesthetics should be strengthened. The electric car should not only have high performance, but also artistic aesthetics. In general, consumers' decision to buy a specific product is not only based on its technical capabilities and suitability for use, but also on the emotional response evoked by its appearance. The physical appearance of a product plays a key role in consumers' preference and choice of a product [8].

Ferrari will use F1 technology to develop lightweight and energy-efficient power systems to ensure that electrification does not compromise the driving experience.

4.2. Supply Chain Level

Firstly, we should establish strict green supply chain management standards and require core suppliers to obtain recognized international environmental certification before 2026. Apart from promoting suppliers' green transformation and reducing Scope 3 emissions, this measure can also help organizations develop a "win-win" strategy to achieve profit and market share goals by reducing environmental risks and impacts, while improving eco-efficiency [9].

Secondly, joint certification and cooperation is necessary. We should establish a collaborative alliance focused on zero-carbon technologies with major suppliers to jointly develop low-carbon aluminum and bio-based composite materials. In addition, we have to establish a battery recycling system to transform retired batteries into energy storage devices or art installations for brand experience centers, forming a closed-loop economy.

4.3. Internal Management and Culture

Firstly, we should emphasize the KPI system reform. Ferrari will adjust the performance appraisal system and incorporate sustainable development goals into the KPIs of senior executives in terms of internal management to ensure that the entire company pays more attention to and implements green transformation.

Secondly, employees are encouraged to consider innovative suggestions related to sustainable development, and a "Sustainable Development Award" is established to reward outstanding proposals. Such measures can not only increase employees' sense of participation, but also promote internal cultural changes and embed green concepts deeply into the corporate culture.

4.4. Customer Relationship Management

Firstly, we should design customized green experience. In detail, customers can pay an additional 5% to offset the carbon emissions of their new vehicle by introducing the "Carbon Neutral Optional Package". Also, they will receive a custom eco-friendly interior. This approach not only enhances customer engagement, but also strengthens Ferrari's sustainable brand image.

Secondly, we should participate in eco-awareness activities, such as cooperating with high environmental protection organizations to hold carbon credit racing events and transform environmental protection actions into unique social capital, which will not only enhance customers' brand loyalty, but also promote the spread of social responsibility. The development of environmental awareness and the adoption of environmentally friendly behaviors depend significantly on fostering supportive community networks and social engagement [10].

4.5. Expected Effects

Generally, Ferrari will not only be able to achieve carbon neutrality, but also maintain the brand's scarcity and high positioning. These series of measures will effectively enhance Ferrari's market competitiveness and strengthen customers' brand identification. Also, it will reduce supply chain risks and ensure the long-term goal of sustainable development.

5. Supporting Logic and Feasibility

Research shows that producing a limited batch of 500 electric vehicles each year makes sense, especially with McKinsey finding that 83% of high-net-worth customers are willing to pay a premium for sustainable luxury. Adding a "Carbon Neutral Optional

Package" could lift the transaction value by around 5% and further boost Ferrari's reputation for environmental leadership.

Supply chain improvements also make economic sense, thanks to EU carbon trading schemes and recycling initiatives, projected to yield around €570 million in benefits. To tackle Scope 3 emissions—a key challenge highlighted in the action plan—Ferrari plans to ensure that 75% of its top suppliers obtain ISO 14064 certification by 2026.

On the technical side, Ferrari's expertise in lightweight engineering, honed through Formula 1, positions it well to integrate carbon fiber batteries into future models. This innovation would help keep vehicles under 1.5 tons while delivering a range of up to 600 km without compromising performance.

Meanwhile, updates to KPIs and the introduction of a "Sustainable Development Award" program are designed to embed sustainability deeper into the company culture, all while maintaining Ferrari's iconic brand identity. These initiatives are expected to improve Ferrari's ESG rating from BBB to A by 2027, potentially reducing financing costs by 25-40 basis points.

6. Conclusion

Ferrari's green transformation is not merely a response to environmental regulations, but a proactive strategic shift aimed at future-proofing its brand in an era increasingly defined by sustainability. Through a carefully crafted approach that balances environmental responsibility with brand exclusivity, the proposed strategy leverages Ferrari's core competencies—such as advanced engineering, supply chain leadership, and strong customer engagement—to achieve both carbon neutrality and long-term competitive advantage.

The initiatives proposed, including low-volume electric vehicle production, the introduction of a "Carbon Neutral Optional Package," supply chain decarbonization, and sustainability-focused customer relationship management, are not only technically and economically feasible but also aligned with the preferences of high-net-worth customers. These steps allow Ferrari to maintain its identity as a performance-driven luxury brand while enhancing its ESG profile and operational resilience.

Moreover, by embedding sustainability into corporate culture through KPI adjustments and incentive systems like the "Sustainable Development Award," Ferrari can drive internal accountability and innovation across departments. This holistic transformation will not only elevate the brand's global image but also mitigate financial risks, improve financing conditions, and secure regulatory alignment.

In essence, this transformation positions Ferrari at the intersection of tradition and innovation—preserving the legacy of excellence while steering boldly toward a low-carbon future. With continuous commitment and strategic execution, Ferrari is poised to become a global icon of sustainable luxury mobility.

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