

Corporate Governance & ESG

Embracing Climate-Related Responsibilities

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Executive Summary:

In today's rapidly evolving business landscape, Corporate Governance and ESG have become integral to long-term value creation. Boards are increasingly expected to look beyond traditional financial oversight and demonstrate strong leadership in climate stewardship, sustainability strategy, and responsible innovation. Effective governance now requires proactive identification of climate-related risks, integration of sustainability into decision-making, transparent reporting, and ensuring the board has (or acquires) the expertise to oversee a company's environmental and social performance. Linking executive compensation to sustainability outcomes reinforces this accountability, positioning companies for resilience, efficiency gains, and enhanced stakeholder trust.

The contrasting case studies of Patagonia, Interface, and Apple illustrate three distinct approaches to sustainability — from deep integration to strategic transformation, and finally, a cautionary example of missed opportunities.

Patagonia showcases what visionary leadership can achieve when sustainability becomes a core purpose. Yvon Chouinard built a company that prioritizes durability, repairability, and circularity. Programs like *Worn Wear* and the use of organic and recycled materials demonstrate how strong environmental values can coexist with commercial success. Patagonia's reputation for authenticity has driven exceptional brand loyalty and robust financial performance, proving that values-driven governance can create significant long-term value.

Interface represents a powerful story of transformation. Under Ray Anderson's leadership, the company shifted from being a carbon-intensive carpet manufacturer to a global sustainability pioneer. By pursuing 100% renewable energy, reducing carbon footprints by 74%, and embedding circular design principles, Interface unlocked major cost efficiencies, strengthened competitiveness, and aligned its business model with future market demands. Their journey demonstrates how governance courage — backed by science and innovation — can convert sustainability into strategic and financial advantage.

In contrast, Apple highlights the sustainability risks inherent in misalignment between messaging and practice. While Apple invests heavily in renewable energy and material recycling, its restrictive repair policies drive frequent device replacements, contributing significantly to global e-waste. With over 5.3 billion smartphones discarded in 2022 and 57.4 million tonnes of global e-waste, Apple's ecosystem plays a measurable part in this challenge. Despite its technological leadership, Apple risks falling behind in circularity and repairability — a critical component of modern sustainability expectations. The case demonstrates how governance decisions around design, product lifecycle, and consumer access can directly impact global environmental outcomes.

Together, these examples illustrate a broader truth: sustainability excellence is ultimately a governance choice. Boards play a decisive role in shaping whether companies treat sustainability as a strategic advantage, a compliance requirement, or a missed opportunity. Organizations that embed climate and circularity principles into their strategic DNA consistently outperform, attract top talent, build stronger brands, and future-proof their business models.

The conclusion is clear:

When boards lead with courage, competence, and long-term vision, sustainability becomes a powerful engine for innovation, resilience, and value creation. Companies that ignore these imperatives risk falling behind in a world where responsible governance is no longer optional — it is a competitive necessity.

Corporate Governance & ESG: Embracing Climate-Related Responsibilities

In the evolving landscape of business, corporate governance has expanded beyond traditional financial oversight. Today, it is imperative for boards of directors to integrate climate-related risks and opportunities into their strategic frameworks. This shift reflects a growing recognition that environmental sustainability is not just a regulatory concern but a fundamental aspect of long-term business success.

The Fiduciary Duty of Boards in Climate Governance

Boards have a fiduciary responsibility to ensure that their companies do more than just comply with environmental regulations. They must proactively manage climate change by embedding it into the core of business strategy. This involves several key actions:

1. **Assessing Climate-Related Financial Risks:** Boards should regularly evaluate the financial risks associated with climate change, including physical risks (e.g., extreme weather events) and transitional risks (e.g., policy changes, market shifts).
2. **Integrating Climate Considerations into Decision-Making:** Climate impacts should be a factor in all strategic decisions, from investment choices to operational processes.
3. **Transparent Reporting to Stakeholders:** Companies should openly communicate their climate-related strategies, risks, and progress to all stakeholders, ensuring accountability and building trust.

Building Climate Expertise and Seeking External Guidance

A robust corporate governance framework ensures that boards possess the necessary expertise to address climate change. This might involve upskilling board members or seeking external advice from climate experts and consultants. This approach ensures informed decision-making and effective risk management.

Linking Executive Compensation to Sustainability

One impactful way to reinforce the board's commitment to climate governance is by linking executive compensation to sustainability

By aligning incentives with sustainability goals, companies can ensure that top executives are motivated to prioritize environmental initiatives. This not only enhances accountability but also drives meaningful actions towards sustainability.

Unlocking Innovation and Long-Term Success

A proactive approach to climate governance does more than mitigate risks—it opens doors to innovation. By embedding climate considerations into their strategies, companies can discover new business opportunities, improve operational efficiencies, and reduce reliance on traditional resources. This innovative mindset can lead to cost savings and a competitive edge in the market.

Furthermore, a strong commitment to sustainability enhances brand value, attracting environmentally conscious consumers and investors. It also opens up new market opportunities in the green economy, positioning companies as leaders in sustainability.

Attracting and Retaining Talent

In today's job market, top talent increasingly seeks employers with strong sustainability credentials. Companies that prioritize ESG and climate governance become attractive to professionals who want to make a positive impact through their work. This not only aids in recruitment but also helps retain employees who are aligned with the company's values.

Contributing to a Sustainable Future

Ultimately, by prioritizing sustainability, boards ensure their companies remain viable and competitive in a rapidly changing world. This commitment not only drives business success but also contributes to a broader sustainable future for all.

Case Study 1: Patagonia - Where Sustainability Meets Success

In the world of business, few stories are as inspiring as Patagonia's. Founded by Yvon Chouinard, this outdoor apparel company has redefined what it means to be a responsible business. It's a place where profit and planet go hand in hand, proving that ethical choices can lead to remarkable success.

A Vision Beyond Profit

Yvon Chouinard didn't just want to sell outdoor gear; he wanted to change the way business was done. From the outset, he envisioned a company that didn't just care about profits but also about the planet. Patagonia was built on the belief that companies can be forces for good, not just profit-making machines.

Sustainability at the Core

Patagonia's commitment to sustainability isn't just a marketing gimmick—it's woven into the fabric of the company. Here's how:

Worn Wear Program

Patagonia's Worn Wear initiative is a standout example. Instead of pushing customers to buy new, Patagonia encourages them to repair their gear or buy used items. This circular approach not only reduces waste but builds a community of loyal customers who share the brand's values.

Sustainable Materials

From organic cotton to recycled polyester, Patagonia uses materials that minimize environmental harm. This focus on sustainability doesn't just benefit the planet—it's also a smart business strategy that resonates with eco-conscious consumers.

Sustainability Driving Growth

Patagonia's dedication to sustainability hasn't slowed its growth; it's fueled it. Over the past decade, the company's revenue has quadrupled, reflecting strong brand loyalty and consumer trust. Patagonia's value is now estimated at around **\$3 billion**, a testament to the power of purpose-driven business.

A Blueprint for Purpose-Driven Success

Patagonia exemplifies how a company can thrive by staying true to its values:

- **Environmental Leadership:** From using sustainable materials to advocating for climate action, Patagonia leads by example.

- **Innovative Business Practices:** Programs like Worn Wear show that sustainability can be integrated into the core of business operations.
- **Customer-Centric Approach:** By building a community around shared values, Patagonia has fostered unparalleled brand loyalty.

Conclusion: Patagonia's Legacy of Impact

Patagonia's story is more than a business case study; it's a testament to the transformative power of purpose-driven leadership. By prioritizing environmental stewardship and ethical practices, Patagonia has shown that businesses can achieve lasting success while making a positive impact on the world.

Case Study 2: Interface – Sustainability as a Strategic Imperative

In the world of manufacturing, few companies have embraced as boldly as **Interface**, a global leader in modular carpet tiles. Under the visionary leadership of **Ray Anderson**, Interface redefined what it means to be an environmentally responsible business, proving that sustainability can be a powerful driver of innovation and profitability.

The Visionary Shift

In 1994, Ray Anderson had a transformative realization about the environmental impact of his company. Instead of sticking to conventional practices, he launched "**Mission Zero**"—a commitment to eliminate any negative environmental impact by 2020. This bold vision became the cornerstone of Interface's business strategy.

Transformative Practices

Interface's commitment to sustainability was comprehensive, affecting every facet of their operations:

1. Renewable Energy Revolution

Interface transitioned its manufacturing facilities to renewable energy, achieving:

- **99% renewable energy usage** in U.S. and European plants.
- **89% global renewable energy adoption.**

This shift not only slashed energy costs—saving the company approximately **\$2.7 million** in one period—but also shielded Interface from fossil fuel price volatility.

2. Operational Excellence

By embracing sustainability, Interface drastically reduced:

- **Carbon emissions** by **74%** since 1996.
- **Water usage** and **waste to landfill** by over 90%.

These efficiencies not only cut costs but also positioned Interface as a sustainability leader.

3. Green Product Innovation Interface introduced carpets crafted from recycled and bio-based materials, meeting the rising demand for sustainable products. This innovation not only attracted eco-conscious customers but also delivered strong financial returns.

Results: Sustainability Driving Business Success

For Interface, sustainability wasn't a cost—it was a growth engine:

- **Lower operating costs** due to energy savings and waste reduction.
- **Enhanced profitability** as sustainable practices attracted new customers.
- **Elevated brand value** and **competitive advantage** in the market.

By embedding sustainability into its core operations, Interface has shown that environmental responsibility and business success can go hand-in-hand. Through visionary leadership and strategic execution, the company has turned sustainability into a competitive advantage, inspiring others to follow suit.

Case Study 3 – Apple: When Innovation Meets a Sustainability Blind Spot

Apple is celebrated worldwide for innovation, design excellence, and premium user experience. Yet behind this remarkable success lies a persistent sustainability challenge—**the company's repair-versus-replace ecosystem**, which has long tilted toward product replacement rather than repair. This philosophy, embedded in device design, pricing, and after-sales structure, has contributed significantly to the mounting crisis of global electronic waste (e-waste).

While Apple promotes its environmental goals in areas like renewable energy and carbon-neutral operations, **its restrictive repair policies tell a different story**—one where consumers often find it easier, cheaper, or simply unavoidable to buy a new device rather than repair an old one.

A Design That Discourages Repair

Unlike sustainability leaders such as Patagonia or Interface, Apple has traditionally crafted devices with **tight hardware integration**—sealed batteries, proprietary screws, glued-in components, and limited access to spare parts. Although this engineering produces elegant, high-performance products, it comes with a cost:

repairs are complex, expensive, and often impractical.

- Replacing a screen or battery at an authorized center can cost *50% or more* of the device's value.
- Independent repair shops face restrictions on parts, tools, and software access.
- Even Apple's "Self Service Repair Program" introduced in 2022 requires specialized tools and long manuals—making it technically possible but economically and logistically challenging for an average consumer.

The implicit message, therefore, remains:

Why repair when you can upgrade?

And millions of consumers do exactly that.

The Result: A Massive Wave of Electronic Waste

Apple sells more than **200–240 million iPhones every year**. When repairs are difficult and replacements are encouraged, discarded devices accumulate rapidly.

Here's the data that highlights the magnitude of the problem:

Global E-waste Trends

- The world generated **57.4 million tonnes** of e-waste in 2021 (UN Global E-waste Monitor).

- This number is growing by **~2 million tonnes every year**.
- Smartphones and other small electronics are among the fastest-growing categories.

Smartphones Specifically

- Consumers discard more than **151 million smartphones annually in the U.S. alone**.
- Roughly **5.3 billion phones** were thrown away globally in 2022 (WEEE Forum). Many of these end up in drawers, landfills, or informal recycling yards where toxic metals leak into soil and water.

Apple's Share of the Impact

While Apple does not publish device-specific disposal numbers, market share and replacement cycle data offer clarity:

- Apple holds around **20% of global smartphone market share**, but **captures over 80% of global smartphone profits**—indicating frequent upgrades.
- Surveys show that iPhone users replace devices every **2.5–3 years**, far earlier than the functional lifespan of most components, especially when repair is discouraged.
- Analysts estimate **hundreds of millions of iPhones** have been discarded in the past decade due to repair cost barriers.

The Emissions Reality

Manufacturing a single smartphone emits:

- **55–95 kg of CO₂** depending on the model
- More than **80%** of a phone's lifetime emissions come from manufacturing, not usage

Therefore, **every avoided replacement meaningfully reduces carbon footprint**.

The Sustainability Paradox

Apple positions itself as a leader in sustainability:

- 100% renewable electricity for offices, stores, and data centers
- Ambitious targets for carbon neutrality by 2030
- Investment in recycled materials like aluminum and rare earth metals

Yet:

If millions of devices are still being discarded prematurely, the environmental gains from renewable energy and recycling are undermined.

Circularity—the foundation of modern sustainability—depends on **repair**, not just recycling.

What Critics and Advocates Say

The global **Right to Repair** movement argues that Apple's practices amount to *planned obsolescence*. Their position is simple:

- Make repairs affordable
- Make parts accessible
- Make device design repair-friendly

Studies supporting this include:

- **Extending a smartphone's lifespan by just one year can save 2.1 million tonnes of CO₂ emissions annually in Europe alone**—equivalent to removing **1 million cars** from the road.
- Repairing a device emits **5–10 times less carbon** than replacing it.

These numbers clearly illustrate how powerful repair-centered policies can be in reducing environmental impact.

What Apple *Could* Do

Experts suggest several changes Apple could implement without sacrificing design excellence:

1. **Improve device reparability** (modular batteries, easier disassembly)
2. **Provide genuine parts at fair prices**
3. **Expand certification for independent repair shops**
4. **Lower authorized repair costs** to discourage unnecessary replacement
5. **Introduce incentives** for customers who choose repair over replacement

With Apple's scale and influence, even small adjustments could shift global industry norms.

Conclusion: A Missed Opportunity Waiting to Be Fixed

Apple's innovation has reshaped the world of technology.

But its repair-versus-replace ecosystem represents a major sustainability blind spot.

Where companies like Patagonia and Interface demonstrate how sustainability can **drive** business success, Apple's restrictive repair model contributes to unnecessary waste, resource depletion, and carbon emissions—at a time when the world can least afford it.

The good news?

With its engineering brilliance and global influence, Apple is uniquely positioned to lead a new era of sustainable technology—one where devices are not just beautifully designed, but also **built to last, easy to repair, and aligned with the principles of circularity**.

A shift in this direction would not only reduce billions of tonnes of e-waste but also reinforce Apple's image as a genuine sustainability leader—not just in marketing, but in practice.