

# Cork – The Case Study of Corticeira Amorim's Sustainable Policies. Making Sustainable Development Goals a Reality

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## Abstract

This study examines how Corticeira Amorim, the world's leading cork transformation group, integrates sustainable development principles into its corporate strategy and operations, with a focus on alignment with the United Nations Sustainable Development Goals (SDGs) and the operationalization of circular economy principles within an ESG governance framework. A qualitative case study approach was employed, drawing on Corticeira Amorim's Sustainability Reports from 2018 to 2024 (Corticeira Amorim 2018, Corticeira Amorim 2019, Corticeira Amorim 2020, Corticeira Amorim 2021, Corticeira Amorim 2022, Corticeira Amorim 2023, Corticeira Amorim 2024), analysed through qualitative content analysis structured around an ESG framework, with each initiative mapped to the most relevant SDGs in accordance with GRI standards and the UN Global Compact. Unlike most studies focused on manufacturing or waste-management sectors, this research provides evidence from a natural resource-based industry where the core raw material itself embodies circular economy and sustainability principles, offering a distinctive perspective on ESG–SDG integration. The findings demonstrate comprehensive SDG alignment across 12 of the 17 goals, with 68.3% renewable energy use, an 8.8% reduction in direct CO<sub>2</sub> emissions, and 88.7% of production materials being renewable. Social investments in talent development, gender equality, occupational safety, and community engagement reflect alignment with SDGs 5, 8, and 10, while governance mechanisms include board-level ESG oversight, integration of sustainability metrics into executive compensation, and externally assured reporting aligned with GRI, CSRD, and EU Taxonomy standards. The study extends existing CE-SDG integration frameworks by demonstrating that circular economy logic, ESG governance, and SDG alignment can be structurally embedded in a natural resource industry where the core material itself carries intrinsic sustainability properties — an empirical contribution from a sector and geographic context underrepresented in sustainability research. The findings show that sustainable business models are both feasible and financially advantageous when circularity and long-term resource management are central to corporate strategy, offering actionable reference for practitioners designing SDG-aligned governance structures and for policymakers assessing the effectiveness of regulatory instruments such as the CSRD and EU Taxonomy in driving genuine corporate sustainability transformation.

## Keywords

Sustainability, ESG, SDGs, Innovation, Circular economy

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## Introduction

Climate change, the depletion of natural resources, and long-standing socio-economic inequalities have transformed sustainability into a dominant paradigm not only for public and government institutions but also for corporate strategy. The United Nations 2030 Agenda for Sustainable Development, articulating 17 Sustainable Development Goals (SDGs), set an important milestone as an integrated framework to guide global action toward a more equitable, resilient, and environmentally sustainable world (United Nations, 2015).

Embracing the SDGs implies a significant transformation of economic systems, including redesigning production processes, consumption models, and organizational governance systems. SDG interactions are inherently systemic; progress in one goal can generate trade-offs or synergies with others, which demands that organizations adopt holistic rather than fragmented approaches to sustainability governance (Nilsson et al., 2017). This systemic complexity is further compounded by the pervasiveness of SDG interdependencies, which require integrated, cross-dimensional action rather than goal-by-goal compliance (Pradhan et al., 2017).

The only way to operationalize the 2030 agenda is to involve every single agent in society; nation-states alone cannot do so. Success depends on the private sector's ability to foster innovation, attract investment, and adopt responsible value-creation practices. Along this path, the corporations' role shifted from a philanthropic, compliance-based perspective to a model based on strategic sustainability integration, where environmental and social aspects are embedded in the core of business model design. Organizations are now actively compelled to contribute to societal well-being, not only to mitigate or minimize impacts or externalities.

Circular economy strategies, climate action, and social inclusion are some of the ways organizations internalize sustainability principles, thereby becoming long-term, resilient, competitive, differentiated, and legitimized in the eyes of their stakeholders. The world leader in the cork industry, Corticeira Amorim, is an interesting example for analyzing the strategic integration of sustainability practices. Established in 1870, it is now one of Portugal's most internationalized corporations, having evolved from traditional cork processing into a diverse and innovative ecosystem encompassing sectors ranging from wine to aerospace, mobility, and construction. Cork, a renewable, recyclable, and naturally carbon-neutral material, is at the core of Corticeira Amorim's business, providing it with a resource inherently aligned with environmental principles and with SDGs 7, 12, 13, and 15 in particular.

While existing research has examined the relationships among ESG frameworks, circular economy strategies, and SDG implementation, empirical studies on natural resource-based industries remain scarce. This study aims to address this gap by analyzing how Corticeira Amorim implements ESG governance and circular economy principles to facilitate SDG achievement. The central research question is: In what ways can a natural resource-based company structurally integrate ESG governance, circular economy principles, and SDG alignment into its corporate strategy and operations?

## Review of the scientific literature

At the firm level, Delgado-Ceballos et al. (2022) argue that connecting SDGs to ESG factors requires a double materiality lens — one that simultaneously considers the impact of sustainability issues on the firm and the firm's impact on society and the environment. This reframes SDG alignment from a reputational exercise into a strategic imperative. However, translating SDG commitment into measurable corporate reporting remains a challenge. Research shows that firm-level contribution to the 2030 Agenda is shaped by governance structures, stakeholder pressure, and strategic sustainability integration, with significant variation in how organizations disclose and score their SDG performance (Pizzi et al., 2021).

The circular economy has emerged as one of the most operationally coherent frameworks for advancing SDG objectives at the organizational level. Recent bibliometric evidence confirms that SDGs are increasingly functioning as structural drivers of circular economy adoption, with growing convergence between both frameworks in academic research and corporate practice (Fauzi et al., 2024). This convergence is particularly evident in sectors where resource flows, waste valorization, and ecosystem preservation are central to business model design.

Puntillo (2023) demonstrates that circular economy business models can serve as concrete vehicles for SDG achievement, particularly in sectors dealing with material flows and waste management. Their findings show that CE-oriented firms generate measurable contributions across multiple SDGs simultaneously, reinforcing the argument that circularity is not merely an environmental strategy but a systemic sustainability

mechanism. Baratta et al. (2023) further show that ESG practices in industry — especially those targeting carbon emissions — produce compounding benefits across environmental, social, and governance dimensions, supporting the case for integrated rather than fragmented sustainability strategies.

Together, these contributions suggest that the most effective corporate sustainability models are those where circular economy logic, ESG governance, and SDG alignment are structurally embedded rather than pursued as parallel, disconnected initiatives.

Cork is a renewable natural material obtained from the bark of the *Quercus suber* L. (cork oak) tree, which is primarily native to the Mediterranean basin. Portugal is the global leader, accounting for over one-third of cork oak area and more than half of world production (Pereira, 2015). Corticeira Amorim, recognized as the King of Cork, is the world's leading producer and innovator in the cork industry (Forbes, 1992). Cork possesses unique properties, including natural lightness, elasticity, and impermeability, as well as excellent thermal and acoustic insulation. These characteristics provide a rare balance of functionality and environmental performance. As a result, cork serves as an ideal renewable alternative to synthetic materials in industries such as construction, transport, aerospace, and fashion (Gil, 2015). Pinto et al. (2023) and Parejo-Moruno (2025) underline the role of cork in the emerging circular bioeconomy, highlighting its substantial potential as a sustainable bioresource that can be transformed into valuable materials and compounds.

The Cork oak forest plays an essential role in the existence and prevalence of southern Portuguese ecosystems. Montados in Portugal are biodiversity hotspots, supporting specific flora and fauna, many of which are endangered species (Aronso et al., 2009). Lopes-Fernandes et al. (2024) state that cork oak forests play a considerable role as carbon sinks, capturing and storing CO<sub>2</sub>, since they are trees with a long lifespan, which contribute to climate regulation. Moreover, cork harvesting is a non-destructive activity, allowing the bark to regenerate every 9 to 10 years, making cork extraction a sustainable forest management model. Its economic and environmental value is supported by close monitoring of the impacts of climate change on soil and microbiota, as these threaten regeneration and ecosystem health, as stated by the studies of Ribeiro et al. (2024) and Marcos-Romero et al. (2025).

Beyond its benefits to ecosystems, the cork industry supports the maintenance of rural livelihoods from a social and territorial standpoint, thereby reducing population displacement from low-density regions. From a social and cultural perspective, it sustains the flow of intergenerational knowledge associated with traditional harvest practices and activities. Conserving cultural heritage, promoting locally based economic development, which is a crucial dimension of sustainability ((Lopes-Fernandes et al., 2024)). These territorial and social benefits are consistent with findings from the broader cork sector, where the industry contributes significantly to regional employment, environmental preservation and socio-economic value creation (Ayuso et al., 2025).

Nearly every part of the raw material is used, embodying the principles of the circular economy in perfection. The byproducts of cork production are used to make flooring, insulation, and composite materials. The part that is not integrated into another production process, and the end-of-life cork product, can be fully recycled (Gil, 2015; Diam Bouchage, 2024).

Although high levels of resource use and efficiency, and waste reduction are considered sustainable production best practices, several challenges remain, mainly those linked to forest certification, protecting biodiversity, and promoting equilibrium between the growth of industrial operations and ecosystem integrity.

In sum, the cork sector exemplifies the interdependence of economic, environmental, and social sustainability, making direct contributions to SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action), and SDG 15 (Life on Land). Its renewable, circular, and socially inclusive model provides a concrete example of how natural industries can advance the objectives of the 2030 Agenda for Sustainable Development.

### **Case Study Context and Sustainability Vision**

Corticeira Amorim is the world's largest cork transformation group (<https://www.amorim.com/pt/>) and a leading multinational based in northern Portugal. The group operates in over 100 markets and across more than 30 countries, showcasing a wide variety of product portfolios structured into various business units: cork stoppers; floor and wall coverings; composite cork; insulation; and raw materials. Amorim has evolved, setting the pace for industry innovation and expanding the sectors in which cork – an inherently renewable and carbon-negative resource – can be applied, ranging from wine to aerospace, mobility, construction, and sustainable architecture.

“Value creation through sustainability” is at the core of its mission statement. Sustainability is embedded in the business model's strategic axis, shaping investment decisions, product development, and resource management. Corks' renewability, recyclability, and biodegradability are central to the company's communication, inherently aligned with environmental stewardship and low-carbon growth. The same alignment is evident in existing innovation systems and strategy, as well as in its perceived competitive advantage and long-term value creation, linking economic performance with social responsibility and ecological preservation.

Corticeira's governance model is structured around a formal Environmental, Social, and Governance (ESG) framework (Porter, 2019). At the board level, ESG performance is monitored, and sustainability is embedded into strategic decision-making by a dedicated committee. Policies from this management level are formalized into documents such as the Code of Conduct, Human Rights and Labour Policy, and Supplier Sustainability Standards, which promote ethical conduct throughout the entire value chain. Employees, suppliers, research institutions, industry associations, and local communities' involvement ensures systematic stakeholder engagement.

In line with the Global Reporting Initiative (GRI) and the UN Global Compact framework, as well as the European Union Corporate Sustainability Reporting Directive (2022), Corticeira Amorim releases annual Sustainability reports, reinforcing transparency and accountability, in which key indicators are presented with external assurance.

Furthermore, the group aligns its sustainability efforts with the United Nations Sustainable Development Goals (SDGs), specifically SDG 12 - Responsible Consumption and Production; SDG 13 – Climate Action; SDG 7 – Affordable and Clean Energy; and SDG 15 – Life on Land. SDG 8 (Decent Work and Economic Growth) and SDG 17 (Partnerships for the Goals) are also implicit goals within Corticeira's sustainability strategy.

The circular economy model, based on a “zero-waste” policy, is one of the strategies the group has implemented to execute its sustainability plan. Throughout the production process, all cork by-products are reintegrated into new solutions and value-added applications. Environmental impacts are assessed and quantified across the product life cycle using Life Cycle Assessment (LCA) (<https://eplca.jrc.ec.europa.eu/lifecycleassessment.html>) methodologies. Employing these practices demonstrates a commitment to the regenerative production model, emphasizing cork as a natural material, a subject, and a platform for sustainable innovation and ecological value creation.

Along with the reports released by Corticeira Amorim, it is stated how a traditional, natural resource industry has used ingenuity to transition to a strategically sustainable, innovation-driven business model. It illustrates how integrating ESG governance, SDG principles, and a circular economy model can simultaneously create environmental, social, and economic value, serving as a vital beacon for other organizations aiming to operationalize it.

### **Research methodology**

A qualitative case study approach was employed to examine how Corticeira Amorim, a global leader in the cork industry, integrates sustainable development principles into its corporate strategy and daily operations. The case study method was chosen for its capacity to provide an in-depth and contextual perspective on the integration of sustainability within organizational culture, strategic decision-making, and long-term planning, particularly in relation to the United Nations Sustainable Development Goals (SDGs).

The analysis is based on Corticeira Amorim's sustainability reports from 2018 to 2024 (Corticeira Amorim, 2018, 2019, 2020, 2021, 2022, 2023, 2024) and was systematically reviewed to trace the company's progress, priorities, and performance across environmental, social, and governance (ESG) dimensions.

The unit of analysis comprised sustainability initiatives, policies, performance indicators, and governance practices disclosed in Corticeira Amorim's Sustainability Reports from 2018 to 2024. A deductive coding approach was employed, using a predefined ESG–SDG analytical framework informed by the Global Reporting Initiative (GRI), the United Nations Global Compact principles, and the Sustainable Development Goals. Each initiative was coded according to its primary ESG dimension (Environmental, Social, or Governance) and then mapped to the Sustainable Development Goals to which it contributed most directly.

To improve analytical consistency, coding categories were defined prior to analysis and applied systematically across all reports. The coding process focused on identifying recurring sustainability themes, quantitative performance indicators, governance mechanisms, and stakeholder engagement practices.

Results were subsequently compared across reporting years to identify patterns, strategic priorities and evidence of sustainability integration over time.

An ESG analytical framework structures the evaluation of Corticeira Amorim's initiatives across three key areas: environmental policies (including energy efficiency, emissions control, and resource circularity), social programs (such as workforce development, diversity, and community engagement), and governance practices (encompassing transparency, ethical management, and stakeholder relationships). Each initiative is mapped to the most relevant SDGs, in accordance with the United Nations Global Compact and the Global Reporting Initiative (GRI) standards.

The data were analyzed through qualitative content analysis to identify recurring themes, concrete actions, and measurable results that illustrate the company's role in advancing sustainable development. The analysis placed particular emphasis on the interdependence among environmental, social, and governance dimensions, underscoring sustainability as a unified, systemic concept. Anchoring the research in verified documentary sources enhances transparency and reliability, offering a solid foundation for evaluating the corporate contribution to the 2030 Sustainable Development Goals.

## **Results and discussion**

### **Environmental Performance**

Corticeira Amorim has consistently demonstrated a commitment to reducing its ecological impact and enhancing material sustainability through a circular production model. According to its latest Sustainability Report, 68.3% of total energy consumption originates from renewable sources, supporting the transition toward low-carbon production. The company also achieved an 8.8% reduction in direct CO<sub>2</sub> emissions and reports that 88.7% of the materials it consumes are renewable. These achievements are reinforced by the ecological role of cork oak forests as natural carbon sinks.

The company's circular economy model is reflected in practices such as cork recycling, waste valorization, industrial symbiosis, and eco-design. Cork by-products are reintegrated into production processes, creating a closed-loop system that maximizes resource efficiency while supporting biodiversity through certified forest management practices.

These environmental initiatives contribute directly to SDGs 7, 12, 13 and 15. The results indicate that environmental performance is not only a compliance requirement but also a strategic source of competitive advantage, reducing dependence on fossil fuels, improving operational efficiency, and supporting product innovation in sectors such as construction, mobility and aerospace.

### **Social Performance**

Corticeira Amorim demonstrates a strong commitment to human capital development, workplace well-being, and community engagement. Programs such as Young@Cork support talent attraction and intergenerational knowledge transfer, while continuous training initiatives strengthen employee competencies in sustainable manufacturing, materials science and innovation.

The company's commitment to occupational safety is evidenced by ISO 45001 certification and the implementation of preventive safety measures. Furthermore, its Gender Equality Plan promotes equal opportunities, fair remuneration and inclusive participation in technical, research and management positions.

At the community level, Corticeira Amorim contributes to local employment, rural development and the preservation of traditional cork-harvesting practices. These initiatives support SDGs 5, 8 and 10 while simultaneously strengthening organizational commitment, employee engagement and innovation capacity. The results indicate that social investment generates both societal value and strategic organizational benefits.

### **Governance and Partnerships**

Governance plays a central role in Corticeira Amorim's sustainability strategy. An ESG Committee operating at the board level ensures that environmental and social considerations are integrated into corporate decision-making. Sustainability indicators are also incorporated into executive performance evaluation, reinforcing accountability and strategic alignment.

The company follows internationally recognized reporting frameworks, including GRI standards, the CSRD and the EU Taxonomy, with key sustainability indicators externally verified. In addition, partnerships with universities, research centers, municipalities, NGOs and industry associations strengthen

innovation and support collaborative sustainability initiatives such as Green Cork and Ecobouchon. These developments reflect the broader regulatory transition promoted by the European Commission's sustainability due diligence agenda (European Commission, 2022).

The results demonstrate that governance acts as an integrating mechanism linking environmental and social performance. Through transparency, stakeholder engagement, and ethical business conduct, Corticeira Amorim advances SDGs 16 and 17 while strengthening trust, institutional legitimacy and long-term sustainability performance.

Table 1 provides a consolidated overview of the sustainability initiatives identified throughout Corticeira Amorim's ESG framework and their contribution to the Sustainable Development Goals. The results reveal that sustainability is not addressed through isolated environmental or social actions but through an integrated governance model that connects operational performance, stakeholder engagement, and long-term value creation. Environmental initiatives, including renewable energy use, carbon emissions reduction, renewable material sourcing, and circular production systems, contribute directly to SDGs 7, 12, 13, and 15. Simultaneously, social initiatives focused on talent development, occupational health and safety, gender equality, and rural community support reinforce SDGs 5, 8, and 10. Governance mechanisms, such as board-level ESG oversight, sustainability-linked executive accountability, and collaborative partnerships with research institutions and civil society organizations, further support SDGs 16 and 17.

**Table 1: Summary of ESG Dimensions and SDGs**

| ESG Dimension | Initiative                          | Indicator                              | SDGs       |
|---------------|-------------------------------------|----------------------------------------|------------|
| Environmental | Renewable Energy                    | 68.3% renewable energy                 | SDG 7, 13  |
| Environmental | Carbon Reduction                    | -8.8% direct CO <sub>2</sub> emissions | SDG 13     |
| Environmental | Renewable Materials                 | 88.7% renewable materials              | SDG 12, 15 |
| Environmental | Cork Recycling & Waste Valorisation | Circular production system             | SDG 12     |
| Social        | Young@Cork Programme                | Talent development                     | SDG 8      |
| Social        | Gender Equality Plan                | Equal opportunities                    | SDG 5      |
| Social        | Occupational Safety                 | ISO 45001 certification                | SDG 8      |
| Social        | Community Development               | Rural employment support               | SDG 10     |
| Governance    | ESG Committee                       | Board-level oversight                  | SDG 16     |
| Governance    | Sustainability-linked KPIs          | Executive accountability               | SDG 16     |
| Governance    | Research Partnerships               | Universities and NGOs                  | SDG 17     |

Importantly, the table illustrates that many sustainability initiatives contribute to multiple SDGs simultaneously, reflecting the interconnected and systemic nature of sustainable development as highlighted by Nilsson et al. (2017) and Pradhan et al. (2017). This finding reinforces the argument that organizations seeking meaningful sustainability outcomes must adopt integrated approaches capable of generating synergies across environmental, social, and governance dimensions rather than pursuing individual goals independently.

From a theoretical perspective, the findings support the growing convergence between ESG governance and Sustainable Development Goal implementation identified in recent literature (Delgado-Ceballos et al., 2022; Fauzi et al., 2024). The evidence suggests that Corticeira Amorim has embedded sustainability considerations into strategic decision-making through a double materiality perspective, simultaneously

addressing the impact of sustainability issues on the organization and the impact of organizational activities on society and the environment. This approach moves beyond traditional compliance-based sustainability management and positions sustainability as a strategic driver of innovation, resilience, and competitive advantage.

The table also demonstrates the practical application of circular economy principles within a natural resource-based industry. The reintegration of cork by-products into new production cycles, combined with resource-efficiency initiatives and the use of renewable materials, confirms the role of circular economy practices as effective mechanisms for advancing multiple SDGs concurrently, supporting the conclusions of Puntillo (2023). Unlike many industries where circularity must be artificially introduced into production systems, Corticeira Amorim benefits from a core material whose intrinsic characteristics—renewability, recyclability, biodegradability, and carbon sequestration capacity—create a structural alignment between business operations and sustainability objectives.

The findings underscore the importance of stakeholder engagement and collaborative value creation, as sustainability initiatives involve employees, suppliers, local communities, customers, regulators, and research institutions. Integrating sustainability into governance structures and partnership networks illustrates that collaborative approaches can enhance organizational legitimacy and advance broader societal objectives.

Overall, Table 1 provides empirical evidence that the integration of ESG governance, circular economy practices, and SDG alignment functions as a coherent and mutually reinforcing system within Corticeira Amorim. The following discussion examines these findings in greater depth and explores their implications for the literature on corporate sustainability, circular economy implementation, and SDG operationalization.

## Discussion

The findings demonstrate that sustainability at Corticeira Amorim is not implemented through isolated initiatives but through an integrated business model that combines environmental stewardship, social responsibility, and governance mechanisms. The results reveal strong alignment between ESG practices and the Sustainable Development Goals, particularly SDGs 7, 8, 12, 13, 15, 16 and 17.

A central contribution of this case study lies in illustrating how circular economy principles can simultaneously generate environmental, social and economic value — a pattern consistent with the theoretical expectations outlined in the literature. Puntillo (2023), examining CE business models in the waste management sector, demonstrates that circular economy models can contribute directly to a significant number of SDGs simultaneously, with the strongest relationships found precisely in the goals most central to Corticeira Amorim's strategy: SDG 7 (Affordable and Clean Energy), SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation and Infrastructure), and SDG 12 (Responsible Consumption and Production). The Corticeira case confirms this multi-SDG contribution pattern in a natural resource industry context, extending Puntillo's findings beyond the waste management sector and suggesting that CE-SDG alignment is a broader organizational phenomenon not restricted to a single industry type.

Regarding governance and reporting, Pizzi et al. (2021) identify board independence, expertise in non-financial reporting, and operation in environmentally sensitive sectors as the key determinants of higher SDG reporting scores among firms. Corticeira Amorim aligns strongly with all three conditions: its ESG Committee operates at board level with dedicated sustainability oversight; it publishes externally assured sustainability reports aligned with GRI, CSRD and EU Taxonomy standards; and it operates in a sector — natural resource transformation — that is inherently environmentally sensitive. This alignment is not incidental. It reflects a governance architecture deliberately designed to embed sustainability into executive accountability structures, including the integration of sustainability indicators into executive compensation — a practice that goes beyond what Pizzi et al. identify as typical among high-scoring firms. In this sense, Corticeira not only confirms the determinants identified in the literature but also represents an advanced case of their operationalization.

The case also illustrates how sustainability can become a source of competitive advantage rather than merely a compliance requirement. The integration of sustainability into innovation processes, product development and strategic decision-making enables Corticeira Amorim to respond to increasing regulatory requirements and growing market demand for sustainable products. This finding reinforces Delgado-Ceballos et al.'s (2022) argument that double materiality, where sustainability performance affects both the firm and society, is the appropriate lens through which to evaluate corporate SDG contribution, and that

firms capable of managing both directions of materiality are better positioned to generate long-term strategic value.

Although Corticeira Amorim reports strong sustainability performance, several significant challenges persist. The long-term resilience of cork oak ecosystems is threatened by climate change, extended droughts, biodiversity loss, and evolving land-use patterns throughout the Mediterranean region. In addition, while sustainability reporting has advanced in sophistication, dependence on self-reported corporate data introduces risks of selective disclosure and potential overstatement of sustainability achievements. These issues underscore the necessity for independent verification, ongoing monitoring, and transparent reporting practices.

Nevertheless, some opportunities for improvement remain. Future sustainability efforts could place greater emphasis on biodiversity monitoring beyond forest certification indicators and on the measurement and reporting of Scope 3 emissions throughout the value chain. Addressing these areas would further strengthen alignment with evolving European sustainability reporting requirements and stakeholder expectations.

Overall, the findings support the argument that traditional resource-based industries can successfully transition towards regenerative and sustainability-driven business models when sustainability is embedded within corporate strategy, governance and operational practices. The Corticeira case extends existing theoretical frameworks by demonstrating that CE-SDG integration is achievable and strategically advantageous in contexts where the core material, cork, is itself a carrier of sustainability properties, creating a structural alignment between resource base and sustainability objectives that few industries can replicate but that many can learn from.

## Conclusions

This study demonstrates that Corticeira Amorim has successfully integrated sustainability into its core business model through the structural alignment of ESG principles, circular economy practices and the Sustainable Development Goals. The case shows that this integration is neither superficial nor compliance-driven, but embedded in governance mechanisms, operational processes, and strategic decision-making — producing measurable outcomes across 12 of the 17 SDGs.

Three key implications emerge from the findings. First, integration matters: the simultaneous pursuit of environmental, social, and governance objectives through a circular economy logic generates systemic coherence and compounding benefits that isolated sustainability initiatives cannot produce. Second, governance is the enabling condition: board-level ESG oversight, external reporting assurance, and the linkage between sustainability performance and executive accountability are not peripheral features but the structural foundations that make SDG alignment credible and durable. Third, the nature of the core resource matters: cork's intrinsic properties — renewable, biodegradable, carbon-negative — create a structural alignment between the material base and sustainability objectives that amplifies the impact of organizational choices. This last point deserves attention from researchers, as it raises the question of how industries without such material advantages can replicate the systemic SDG integration observed here.

For practitioners, the case demonstrates that adopting a circular, SDG-aligned business model is both feasible and financially advantageous when sustainability is treated as a strategic asset rather than a cost. For policymakers, it illustrates the effectiveness of regulatory tools such as the CSRD and EU Taxonomy in driving genuine corporate sustainability transformation. For researchers, it provides an empirical foundation for extending CE-SDG integration frameworks beyond single-sector studies.

Future work should focus on enhancing biodiversity metrics beyond forest certification, expanding Scope 3 emissions reporting, and strengthening digital sustainability monitoring. These developments will be essential for Corticeira Amorim — and for the field more broadly — as reporting standards continue to evolve and stakeholder expectations rise.

## Research Limitations

Several limitations should be considered when interpreting these findings. First, the analysis relies primarily on corporate sustainability reports and publicly available documentation produced by Corticeira Amorim. While these sources offer comprehensive and externally verified information, they may emphasize positive achievements and strategic objectives over challenges, trade-offs, or areas requiring improvement. Therefore, the findings should be understood within the context of corporate sustainability disclosure practices.

Second, this research employs a single-case study approach centered on a leading company in the cork industry. Although this enables an in-depth examination of sustainability integration within a specific organizational context, it restricts the generalizability of the results to other sectors, regions, or organizations operating under different economic, regulatory, or environmental conditions.

Third, this study does not directly incorporate stakeholder perspectives. While documentary evidence offers valuable insights into corporate sustainability practices, it does not reflect how employees, local communities, suppliers, customers, regulators, or other stakeholders perceive the effectiveness and impact of these initiatives. Including stakeholder perspectives could yield a more nuanced understanding of sustainability performance and organizational legitimacy.

Furthermore, although the analysis identifies significant contributions to environmental sustainability, it does not systematically evaluate biodiversity outcomes or assess Scope 3 emissions across the value chain. Given the growing importance of biodiversity conservation and value-chain accountability in European sustainability reporting frameworks, these dimensions require further investigation.

Another limitation concerns the evolving nature of ESG reporting and compliance systems. Despite advances in sustainability reporting frameworks, there is no universally harmonized compliance and assessment system that enables fully objective, standardized, and comparable evaluations of ESG performance across organizations, industries, and regions. Variations in reporting methodologies, materiality assessments, indicators, measurement criteria, and disclosure practices can affect comparability, even among companies within the same sector. Although frameworks such as the GRI Standards, CSRD, ESRS, EU Taxonomy, and UN Global Compact enhance transparency and standardization, ESG evaluation remains subject to interpretation and differing levels of implementation maturity. Therefore, comparisons between organizations should be made cautiously, especially when assessing sustainability performance across industries.

Future research could address these limitations by employing comparative multi-case studies, stakeholder interviews, surveys, and mixed-method approaches. These methods would facilitate triangulation of findings, offer a more comprehensive assessment of sustainability performance, and deepen understanding of how ESG governance, circular economy practices, and Sustainable Development Goal alignment are implemented across various organizational contexts. Additionally, future studies may benefit from the ongoing maturation of international ESG reporting and compliance frameworks, which could enable more robust benchmarking and objective cross-sector comparisons.

### **Generative Artificial Intelligence (GenAI) usage statement**

Claude Sonnet 4.6 (Anthropic) was used to support the preparation of this manuscript, including structuring, text drafting and revision. All AI-generated content was critically reviewed, edited and validated by the authors, who take full responsibility for the content of the present article.

### **References**

- Aronson, J., Pereira, J. S., & Pausas, J. G. (2009). *Cork oak woodlands on the edge: Ecology, adaptive management, and restoration*. Island Press.
- Ayuso, S., Hereu, A., & Ventalló, E. (2025). Societal impact of the Catalan cork industry: Measuring its socioeconomic and environmental value. *Sustainability*, 17(13), 5899. <https://doi.org/10.3390/su17135899>
- Baratta, A., Cimino, A., Longo, F., Solina, V., & Verteramo, S. (2023). The impact of ESG practices in industry with a focus on carbon emissions: Insights and future perspectives. *Sustainability*, 15, 6685. <https://doi.org/10.3390/su15086685>
- Corticeira Amorim. (2018). *Relatório de sustentabilidade 2018*. Corticeira Amorim, SGPS, S.A.
- Corticeira Amorim. (2019). *Relatório de sustentabilidade 2019*. Corticeira Amorim, SGPS, S.A.
- Corticeira Amorim. (2020). *Relatório de sustentabilidade 2020*. Corticeira Amorim, SGPS, S.A.
- Corticeira Amorim. (2021). *Relatório de sustentabilidade 2021*. Corticeira Amorim, SGPS, S.A.
- Corticeira Amorim. (2022). *Relatório de sustentabilidade 2022*. Corticeira Amorim, SGPS, S.A.
- Corticeira Amorim. (2023). *Relatório de sustentabilidade 2023*. Corticeira Amorim, SGPS, S.A.
- Corticeira Amorim. (2024). *Relatório de sustentabilidade 2024*. Corticeira Amorim, SGPS, S.A.

- Delgado-Ceballos, J., Ortiz-De-Mandojana, N., Antolín-López, R., & Montiel, I. (2022). Connecting the Sustainable Development Goals to firm-level sustainability and ESG factors: The need for double materiality. *Business Research Quarterly*, 26(1), 2–10. <https://doi.org/10.1177/23409444221140919>
- Diam Bouchage. (2024). *Our environmental approach*. Environmental Report.
- European Commission. (2022). *Proposal for a directive on corporate sustainability due diligence and amending Directive (EU) 2019/1937 (COM/2022/71 final)*. European Commission.
- European Union. (2022). Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (CSRD). *Official Journal of the European Union*, L322, 15–63.
- Fauzi, M.A., Abidin, N.H.Z., Omer, M.M., Kineber, A.F. & Rahman, A.R.A. (2024) Role of sustainable development goals in advancing the circular economy: A state-of-the-art review on past, present and future directions. *Waste Management & Research: The Journal for a Sustainable Circular Economy*. 42(7):520-532. doi:10.1177/0734242X231196765
- Forbes. (1992, May). Américo Amorim: The king of cork. *Forbes Magazine*.
- Gil, L. (2015). Cork: Sustainability and new applications. *Frontiers in Materials*, 1, Article 38. <https://doi.org/10.3389/fmats.2014.00038>
- Lopes-Fernandes, M., Martínez-Fernández, E., Alves, R., Boa-Nova, D., Branquinho, C., Bugalho, M. N., Campos-Mardones, F., Coca-Pérez, A., Frazão-Moreira, A., Marques, M., Moreno-Ortiz, J., Paulo, O., Príncipe, A., Quintero, V., Sendim, A., Sobral, H., & Escalera-Reyes, J. (2024). *Cork oak woodlands and decline: A social-ecological review and future transdisciplinary approaches*. *Agroforestry Systems*, 98, 1927–1944. <https://doi.org/10.1007/s10457-024-00999-4>
- Marcos-Romero, J. C., Poveda, J., & Diez, J. J. (2025). Relation of the soil microbiota of cork oak groves and surrounding grasslands to tree decline. *Applied Soil Ecology*, 212, Article 106165. <https://doi.org/10.1016/j.apsoil.2025.106165>
- Nilsson, M., Griggs, D., & Visbeck, M. (2017). *A guide to SDG interactions: From science to implementation*. ICSU.
- Parejo-Moruno, F.M., Linares-Luján, A.M., Faísca, C.M., & Rangel Preciado, J.F. (2025). Industrial agglomeration and cooperation: Evidence of circular bioeconomy from the Iberian cork industry. In *Circular economy and sustainable development* (pp. 74–86). Edward Elgar Publishing.
- Pereira, H. (2015). The rationale behind cork properties: A review of structure and chemistry. *BioResources*, 10(3), 6207–6229.
- Pinto, C., Cravo, S., Mota, S., Rego, L., Rocha e Silva, J., Almeida, A., Afonso, C. M., Tiritan, M. E., Cidade, H., & Almeida, I. F. (2023). Cork by-products as a sustainable source of potential antioxidants. *Sustainable Chemistry and Pharmacy*, 36, Article 101252. <https://doi.org/10.1016/j.scp.2023.101252>
- Pizzi, S., Rosati, F., & Venturelli, A. (2021). The determinants of business contribution to the 2030 agenda: Introducing the SDG reporting score. *Business Strategy and the Environment*, 30(1), 404–421. <https://doi.org/10.1002/bse.2628>
- Porter, M. E., Serafeim, G., & Kramer, M. R. (2019, October). Where ESG fails. *Institutional Investor*.
- Pradhan, P., Costa, L., Rybski, D., Lucht, W. & Kropp, J.P. (2017). A Systematic Study of Sustainable Development Goal (SDG) Interactions. *Earth's Future*, 5(11), 1169–1179. <https://doi.org/10.1002/2017EF000632>
- Puntillo, P. (2023). Circular economy business models: Towards achieving sustainable development goals in the waste management sector—Empirical evidence and theoretical implications. *Corporate Social Responsibility and Environmental Management*, 30(2), 941-954. <https://doi.org/10.1002/csr.2398>
- Ribeiro, S., Cerveira, A., Soares, P., Ribeiro, N. A., Camilo-Alves, C., & Fonseca, T. F. (2024). Natural regeneration of cork oak forests under climate change: A case study in Portugal. *Frontiers in Forests and Global Change*, 7, Article 1332708. <https://doi.org/10.3389/ffgc.2024.1332708> In *Silvopastoral practices and sustainable land management* (pp. 3–12). Springer.
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development* (Resolution A/RES/70/1). United Nations.