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Sustainability as Strategy: The Role of ESG in Strengthening
ALUMIL S.A.'s Competitive Position

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Patras, Greece, June 2026

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Abstract

This thesis explores the strategic integration of sustainability into business operations as a driver of long-term competitive advantage, with particular reference to the Greek economic landscape. In recent years, the increasing significance of Environmental, Social and Governance (ESG) factors has reshaped corporate strategies globally, shifting sustainability from a peripheral concern to a central pillar of business success.

The study focuses on how Greek enterprises, such as ALUMIL S.A., incorporate ESG principles into their strategic planning and how these initiatives enhance organisational resilience, innovation and market positioning. Through a literature review and a qualitative case study, the research highlights both the tangible and intangible benefits derived from sustainability-oriented strategies.

The argument developed in the thesis is that ESG should not be treated only as a reporting exercise or a public-relations activity. When it is connected to product design, circular economy practices, governance standards, employee development and stakeholder trust, ESG can become part of the way a firm competes. In ALUMIL's case, sustainability is especially relevant because aluminium systems are directly linked to energy-efficient buildings, recycled materials and the wider transition of European construction towards lower-carbon solutions.

Keywords

ESG, sustainability strategy, competitive advantage, circular economy, ALUMIL S.A., Greece

Περίληψη

Η παρούσα διπλωματική εργασία εξετάζει τη στρατηγική ενσωμάτωση της βιωσιμότητας στις επιχειρηματικές λειτουργίες ως παράγοντα μακροπρόθεσμου ανταγωνιστικού πλεονεκτήματος, με ιδιαίτερη αναφορά στο ελληνικό οικονομικό περιβάλλον. Τα τελευταία χρόνια, η αυξανόμενη σημασία των παραγόντων Περιβάλλοντος, Κοινωνίας και Εταιρικής Διακυβέρνησης (ESG) έχει επηρεάσει σημαντικά τις εταιρικές στρατηγικές σε παγκόσμιο επίπεδο, μετατρέποντας τη βιωσιμότητα από δευτερεύον ζήτημα σε βασικό πυλώνα επιχειρηματικής επιτυχίας.

Η εργασία εστιάζει στον τρόπο με τον οποίο ελληνικές επιχειρήσεις, όπως η ALUMIL S.A., ενσωματώνουν τις αρχές ESG στον στρατηγικό τους σχεδιασμό και πώς οι σχετικές πρωτοβουλίες ενισχύουν την οργανωσιακή ανθεκτικότητα, την καινοτομία και τη θέση τους στην αγορά. Μέσα από βιβλιογραφική επισκόπηση και ποιοτική μελέτη περίπτωσης, η έρευνα αναδεικνύει τόσο τα απτά όσο και τα άυλα οφέλη που προκύπτουν από στρατηγικές προσανατολισμένες στη βιωσιμότητα.

Το βασικό επιχείρημα της εργασίας είναι ότι το ESG δεν πρέπει να αντιμετωπίζεται μόνο ως ζήτημα συμμόρφωσης ή εταιρικής προβολής. Όταν συνδέεται με τον σχεδιασμό προϊόντων, την κυκλική οικονομία, τη διακυβέρνηση, την ανάπτυξη των εργαζομένων και την εμπιστοσύνη των ενδιαφερόμενων μερών, μπορεί να αποτελέσει ουσιαστικό στοιχείο ανταγωνιστικής στρατηγικής. Στην περίπτωση της ALUMIL, η βιωσιμότητα αποκτά ιδιαίτερη σημασία, καθώς τα συστήματα αλουμινίου συνδέονται άμεσα με την ενεργειακή αποδοτικότητα των κτιρίων, τη χρήση ανακυκλωμένων υλικών και τη μετάβαση του ευρωπαϊκού κατασκευαστικού κλάδου σε λύσεις χαμηλότερου περιβαλλοντικού αποτυπώματος.

Λέξεις - Κλειδιά

ESG, βιωσιμότητα, ανταγωνιστικό πλεονέκτημα, κυκλική οικονομία, ALUMIL S.A., Ελλάδα

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List of Abbreviations & Acronyms

ALUMIL: ALUMIL Aluminium Industry S.A.
ATHEX: Athens Exchange
CSRD: Corporate Sustainability Reporting Directive
ESG: Environmental, Social and Governance
ESRS: European Sustainability Reporting Standards
EU: European Union
SDGs: Sustainable Development Goals

1. Introduction

Sustainability has not always occupied the position it holds today in corporate strategy. For many years, environmental and social initiatives were treated as peripheral concerns — secondary, at best, to the business of generating profit. That interpretation has become increasingly difficult to sustain. Climate change, energy insecurity, tightening regulation, investor pressure and shifting customer expectations have collectively altered the terms on which companies are judged. Profitability alone is no longer sufficient. Companies are now expected to demonstrate awareness of their environmental impacts, responsible treatment of stakeholders and credible governance structures (European Commission, 2025).

Nowhere is this shift more visible than in Europe. The EU has embedded sustainability reporting and responsible business conduct within a wider regulatory and strategic agenda. Large and listed companies are now required, under the Corporate Sustainability Reporting Directive (CSRD), to publish regular reports on sustainability risks, impacts and opportunities, with the broader framework continuing to evolve through delegated and implementing acts (European Commission, 2025; European Commission, 2026). The framework for corporate sustainability due diligence, developed in parallel, reinforces the expectation that companies address environmental and human-rights issues across their operations and value chains (European Commission, 2024).

What emerges from this picture is a fundamental reshaping of competitive strategy. Firms are no longer evaluated solely on price, quality and distribution — increasingly, they are judged on transparency, resilience, responsible sourcing, circularity and the credibility of their sustainability commitments. ESG has, in this sense, moved well beyond the status of a peripheral ethical issue. It has become more closely associated with long-term strategic preparedness and business quality (European Commission, 2025).

For Greece, the discussion carries additional weight. The Greek economy has navigated a prolonged period of crisis and adjustment, followed by gradual recovery and renewed efforts to strengthen competitiveness and investor confidence (European Stability Mechanism, 2025). The European Stability Mechanism notes that Greece has undergone a major economic adjustment process and continues to be monitored in relation to debt sustainability, reform implementation and macroeconomic resilience (European Stability Mechanism, 2025). In that context, sustainability can be understood not merely as an environmental concern, but as part of a broader attempt to build a more modern, outward-looking and institutionally credible business environment.

The issue is especially pressing for listed firms and internationally active industrial companies. Capital markets have increasingly incorporated ESG-related visibility into the evaluation of issuers. The Greek market has moved in this direction through the ATHEX ESG Index, which functions as a reference point tracking the performance of companies that disclose ESG-related data (ATHEX, 2021; ATHEX, 2025). ESG has, by that measure, entered the Greek investment and disclosure environment in a more structured and formal way than at any previous point.

ALUMIL S.A. provides a useful case through which to examine the relationship between sustainability and strategy (ATHEX, n.d.; ALUMIL, 2025a). Listed on the Athens Stock Exchange, the company operates in the aluminium sector — a field where environmental performance, energy intensity, circularity and product relevance to the built environment are all strategically consequential (ATHEX, n.d.). Architectural aluminium systems are bound up with questions of energy performance, durability and material reuse, and aluminium itself carries strong recycling potential (European Commission, 2020; European Environment Agency, 2025). ALUMIL therefore offers an analytically rich context for exploring how ESG may contribute to competitive positioning rather than functioning only as symbolic communication.

The company's public sustainability communication presents ESG as an integral element of its business identity (ALUMIL, 2025a). It highlights recycled aluminium, renewable electricity use, water reuse, governance practices, social indicators and a commitment to sustainability reporting aligned with current European expectations (ALUMIL, 2025a). Of particular note are circular solutions such as Loop 60 and Loop 80, which position recycled aluminium as a product-level component of the company's value proposition (ALUMIL, 2023; ALUMIL, 2025a). Taken together, these features make ALUMIL a suitable case through which to examine whether ESG is being genuinely integrated into resources, capabilities and market positioning.

The aim of this dissertation is to examine how ESG can strengthen ALUMIL S.A.'s competitive position. The study approaches this through a strategic-management lens, and it does not attempt to establish direct causality between ESG and financial performance in any narrow econometric sense. Rather, it employs a qualitative case-study approach to explore how sustainability-related initiatives may contribute to differentiation, resilience, regulatory readiness, stakeholder confidence and innovation — and, in so doing, to assess whether ESG in the ALUMIL case appears to function as a developing strategic capability rather than simply as a reporting obligation or reputational layer.

The central research question is: How does the integration of ESG principles into ALUMIL S.A.'s strategy contribute to the company's competitive positioning in Greece and international markets? The aluminium and construction-related sectors are increasingly subject to circular-economy expectations, building-efficiency concerns and evolving ESG standards. It is therefore worth examining how a Greek listed industrial firm interprets and operationalises sustainability within this changing strategic environment (European Commission, 2020; European Environment Agency, 2025).

The dissertation is organised as follows. The first chapter introduces the topic, the business context and the rationale for focusing on ALUMIL. The second chapter develops the theoretical framework, drawing on the evolution from CSR to ESG, the resource-based view, the natural-resource-based view, stakeholder theory, shared value and circular economy. The third chapter explains the methodology and the limitations of the research design. The fourth chapter presents the case-study analysis of ALUMIL, while the fifth chapter interprets the findings through the theoretical framework. The final chapter presents the conclusions, recommendations and possible directions for future research.

i. Background and Rationale

The growing importance of ESG is not simply a managerial fashion. It reflects something deeper — a broader transformation in how business quality is judged by markets, regulators and society. Environmental performance was, in earlier periods, discussed mainly in terms of legal compliance. Social responsibility was associated with philanthropy or local community support. Governance, meanwhile, tended to be treated as a formal matter of internal control and board structure. ESG brings these dimensions together in a more integrated framework and encourages firms to treat them as interconnected aspects of long-term value creation and corporate quality (European Commission, 2025).

Manufacturing companies feel this shift particularly acutely. Sustainability is, for them, directly connected to physical resources, energy use, waste management, labour practices and supply-chain organisation. A manufacturer cannot credibly address sustainability through abstract commitments alone — its environmental and social performance is shaped by sourcing choices, production methods, product design, operational discipline and stakeholder relationships. In that sense, ESG brings strategy closer to operations and raises an awkward but necessary question: can the company's value-creation model remain competitive under stricter environmental, regulatory and social expectations?

Few sectors illustrate this dual pressure as clearly as aluminium. Primary aluminium production is associated with high energy intensity, yet aluminium is also highly recyclable and strategically important in construction, transport and low-carbon technologies (European Commission, 2020; European Environment Agency, 2025). Producers in this sector face scrutiny over energy use, emissions and environmental impact. At the same moment, aluminium can support circular economy objectives, material efficiency and lower-impact solutions when recycling systems and product applications are managed well. Firms have good reason, therefore, to treat sustainability not only as a defensive response but as a potential source of innovation and positioning (European Commission, 2020; European Environment Agency, 2025).

ALUMIL's products add a further layer to this picture. Buildings are a major arena in which questions of energy efficiency, lifecycle performance and material choice increasingly matter. Architectural aluminium systems contribute to insulation, durability, maintenance and design quality — they are only one part of a building's total environmental profile, but they are not a negligible one. A firm such as ALUMIL can, as a result, link sustainability not only to internal operations but also to customer-facing value in the built environment. That linkage strengthens the strategic interest of the case considerably.

Greece adds its own layer of complexity to the rationale. Greek firms have had to rebuild confidence and competitiveness after a prolonged period of instability, and recovery — while real — has left companies under continued pressure to modernise, internationalise and align with European standards of transparency and business conduct. ESG can support that adjustment. It gives firms a structured means of demonstrating governance quality and readiness for future market and regulatory expectations. The present study takes the position that this dynamic is especially relevant for listed firms, given that the ATHEX

ESG Index has brought ESG disclosure and scoring into the Greek capital-market environment in a formally recognised way (ATHEX, 2021; ATHEX, 2025).

The rationale for focusing on ALUMIL is threefold. It is a Greek listed industrial company, making it directly relevant to the national business environment. Its products are closely connected to sustainability issues in buildings and materials. And it has publicly communicated a range of ESG-related initiatives — including recycled aluminium, renewable electricity use, water reuse, governance commitments and structured ESG reporting. These characteristics make ALUMIL a genuinely useful case for exploring how ESG may move from compliance and communication into strategy.

ii. Research Aim and Objectives

The main aim of this dissertation is to examine the role of ESG in strengthening ALUMIL S.A.'s competitive position. ESG is not treated here as a purely moral topic, nor is sustainability reduced to an immediate financial return. Rather, the study examines how sustainability-related activities may influence resources, capabilities, stakeholder relationships, legitimacy and market differentiation — and what that influence implies for competitive strategy.

Four objectives structure the analysis. The first is to explain how ESG has become relevant to competitive strategy. This requires a discussion of the theoretical relationship between sustainability and advantage, particularly through the resource-based view, the natural-resource-based view, stakeholder theory and shared value. These perspectives help to clarify why sustainability may generate strategic value in some cases while remaining largely superficial in others.

The second objective is to analyse ALUMIL's publicly available ESG activities. The study examines how the company presents its sustainability strategy, which disclosed initiatives appear most closely connected to the business model, and how those initiatives may support differentiation, resilience and legitimacy. Particular weight is placed on recycled aluminium and circular economy, since these issues are directly related to the company's industrial capability and product offering (ALUMIL, 2023; ALUMIL, 2025a).

The third objective is to assess the challenges and limits of ESG integration. A balanced account cannot overlook the fact that ESG involves investment costs, measurement difficulty, organisational complexity and credibility risks. Companies may report more information without necessarily building deeper capabilities, and they may also face accusations of greenwashing if public claims are insufficiently supported by evidence. The study therefore examines both the potential benefits and the genuine limitations of ESG as strategy.

The fourth objective is to draw broader implications for Greek companies. ALUMIL is the central case, but the analysis may also offer insight into how Greek firms can connect ESG more convincingly to industrial modernisation, international competitiveness and response to European sustainability expectations. In that respect, the dissertation seeks to contribute not only to the understanding of one company but also to wider reflection on sustainability as a strategic issue in the Greek business environment.

iii. Research Question

The central research question is: How does the integration of ESG principles into ALUMIL S.A.'s strategy contribute to the company's competitive positioning in Greece and international markets?

Four supporting questions follow from this. What theoretical explanations connect ESG with competitive advantage? How does ALUMIL communicate and operationalise ESG in its public disclosures? Which ESG initiatives appear most relevant to the company's competitive position? And what limitations or risks may reduce the strategic value of ESG in this case?

These questions are deliberately qualitative. Calculating the precise financial return of any particular ESG investment would require internal data, customer evidence and a longer time horizon than is available in this study. The dissertation instead aims to interpret the strategic meaning of ESG by relating publicly available company evidence to established theoretical perspectives

iv. Scope of the Study

The dissertation focuses specifically on ESG as a strategic issue in ALUMIL S.A. It does not attempt to cover every dimension of the global aluminium industry, nor does it address every sustainability concern in Greek business. The scope is deliberately limited to the relationship between sustainability and competitive position in one case organisation — a narrower focus that allows for more detailed interpretation, but one that means the findings should not be treated as statistically generalisable.

Public sources form the primary empirical basis of the study. These include ALUMIL's sustainability communications, Athens Exchange information, European policy material and academic literature (ALUMIL, 2023; ATHEX, 2021; European Commission, 2025; Barney, 1991). Public sources are appropriate for a desk-based dissertation concerned with corporate positioning and disclosed strategy. They cannot, however, reveal every aspect of internal decision-making — they do not show how managers prioritise ESG investments, how employees experience sustainability initiatives or how customers assess ALUMIL's sustainability profile in actual purchasing decisions (ALUMIL, 2023; ATHEX, 2021; European Commission, 2025; Barney, 1991).

It is worth noting that the study focuses on strategic interpretation rather than technical environmental measurement. Full product-level carbon footprints, lifecycle assessments and independent verification of engineering claims are outside its remit. Those tasks would require specialist technical data and a different methodological design altogether. What the dissertation examines, instead, is what the company's ESG initiatives may mean for strategic positioning, competitiveness and stakeholder perception.

A cautious approach to company claims runs throughout the analysis. ALUMIL's public disclosures are important sources of evidence, but they are not neutral — like all corporate communications, they present the company in a favourable light. The present study therefore treats them as part of the case material while interpreting them through academic

theory and external institutional context. The intention is to produce a more balanced and analytically credible account than would result from accepting public disclosures at face value.

2. Theoretical Framework

Explaining how sustainability — and ESG in particular — moves from the margins of corporate responsibility into the centre of competitive strategy is the principal theoretical ambition of this dissertation. That shift, however, is not automatic. The literature is clear that ESG initiatives do not universally improve business performance (Bhandari, Ranta and Salo, 2022; Lichtenthaler, 2022). Sustainability becomes strategically meaningful only under particular conditions: when it is embedded in valuable capabilities, linked to the firm's core business model, credible to stakeholders, and aligned with broader market and regulatory developments (Bhandari, Ranta and Salo, 2022; Lichtenthaler, 2022).

Five main theoretical perspectives inform the analysis. The first concerns the broader evolution from corporate social responsibility to ESG, which helps explain why sustainability is now discussed in more formal strategic terms. The second is the resource-based view, which offers a framework for understanding how ESG-related resources and routines may become sources of competitive advantage (Barney, 1991). The third is the natural-resource-based view — especially relevant in manufacturing, where environmental constraints and capabilities sit at the centre of strategy (Hart, 1995). The fourth is stakeholder theory, which explains why sustainability can influence the quality of a firm's relationships with investors, customers, employees, regulators and society. Fifth and finally, shared value and circular economy perspectives matter because they probe whether sustainability connects to real value-creation logic, or whether it functions only as symbolic communication (Porter and Kramer, 2011; European Commission, 2020).

What the literature suggests, taken together, is that ESG demands a balanced reading. Its strategic potential is real — but so is the risk that ESG remains superficial, fragmented or performative when it is never translated into organisational capabilities and credible action. In the case of ALUMIL, that balance is particularly worth examining, given the relationship between industrial production, circular aluminium, energy-relevant building systems and institutional legitimacy in an increasingly ESG-conscious business environment (ALUMIL, 2025a).

i. ESG as an Evolution of Corporate Responsibility

Corporate responsibility did not begin with ESG. Earlier approaches clustered around philanthropy, community support and reputational action — activities that ran alongside the firm's economic functions rather than inside them. They could generate goodwill. Rarely, though, did they feed back into strategic decision-making, operational routines or any form of measurable organisational change.

A significant conceptual shift came with the emergence of the triple bottom line (Elkington, 1997). Elkington's argument was direct: financial returns alone do not capture business performance. Environmental and social dimensions — often compressed into the shorthand of People, Planet and Profit — deserve equal standing (Elkington, 1997). By

challenging the primacy of financial metrics, the triple bottom line helped legitimise the idea that firms should be evaluated in a broader social and ecological context.

Yet broad ambition and practical utility are not the same thing. The triple bottom line gave firms a more expansive vocabulary without always supplying comparably strong tools for measurement, comparability or governance discipline. Over time, as stakeholder expectations grew more demanding, the gap between responsible language and accountable evidence became difficult to ignore. Investors, regulators and other audiences wanted structured proof of how environmental, social and governance issues were actually being managed — not merely acknowledged in principle.

ESG emerged from precisely that more demanding context. Unlike earlier CSR language, it is closely associated with disclosure frameworks, risk management, governance oversight, investor scrutiny and formal comparability (European Commission, 2025; IBM, 2024). Ethical responsibility is not discarded; rather, many ethical concerns are translated into categories that can be more systematically monitored, reported and evaluated. In this sense, ESG marks a broader movement away from symbolic responsibility and toward managerial accountability. Stakeholders increasingly expect firms not simply to claim responsible intentions, but to demonstrate how sustainability is embedded in structures, decisions and measurable outcomes (European Commission, 2025; IBM, 2024).

Underlying this shift is a tightening connection between sustainability and capital-market logic. Environmental and social issues are now routinely read as matters of exposure, preparedness, governance quality and long-term business resilience — not only as moral concerns. That reframing gives ESG a different strategic weight from earlier forms of CSR. Credibility matters: a company is judged not only on whether it appears responsible, but on whether it can identify, manage and disclose sustainability-related risks in ways that hold up under investor and regulatory scrutiny.

It is worth pausing here to note that ESG should not be treated as a perfect or uncontested framework. Its growing visibility has produced legitimate criticism regarding inconsistent metrics, uneven comparability across firms and industries, and the risk that sustainability language is deployed without corresponding strategic substance. For the present dissertation, those criticisms serve a useful purpose. They guard against the uncritical assumption that ESG is automatically valuable. A sharper and more productive question is when, and under what conditions, ESG becomes strategically meaningful in specific sectors and firms.

ii. Resource-Based View and ESG Capabilities

Among the theoretical frameworks available for analysing ESG, the resource-based view stands out for one specific reason: it redirects analytical attention from external market conditions toward the resources and capabilities firms develop internally. Barney's core argument is that sustained competitive advantage depends on resources that are valuable, rare, difficult to imitate and not easily substituted (Barney, 1991). Applied to ESG, this logic draws a sharp line between sustainability as surface-level communication and sustainability as a deeper strategic capability.

That line matters. Many firms now adopt broadly similar sustainability language — public commitments, policy statements and ESG reports have proliferated to the point where they may be necessary for legitimacy but are rarely sufficient for durable differentiation. If competitors can reproduce the same communication without significant effort, the communication itself cannot be a strong source of advantage. What matters more is whether ESG is translated into firm-specific capabilities: technical process innovation, trusted certification systems, supplier coordination, resource-efficiency routines, strong governance structures and organisational learning that accumulates over time.

The VRIN framework sharpens this further. A sustainability-related capability is valuable when it improves a company's ability to reduce cost, manage risk, access markets, support customer value or strengthen resilience. Rarity requires that only a limited number of firms can demonstrate the capability credibly at a comparable level. Inimitability follows from tacit knowledge, specialised investment, repeated problem-solving, embedded routines or long-developed relationships — conditions that resist straightforward replication. Non-substitutability, finally, means that competitors cannot achieve the same strategic effect through simpler or less demanding alternatives.

Applying this framework to ESG encourages a more selective interpretation. A sustainability report by itself is unlikely to be rare or difficult to imitate. A general environmental claim may serve communication purposes without representing a genuine strategic resource. A combination of recycling capability, process integration, externally verified product claims, traceable circularity and established governance systems is a different matter — it comes closer to the kind of integrated capability structure the resource-based view associates with competitive advantage. ESG matters strategically not when it is merely visible, but when it becomes organisationally embedded.

The present chapter argues that this logic is directly relevant to ALUMIL. The strategic significance of the company's sustainability activities lies less in the existence of ESG language and more in the possibility that circularity, recycled aluminium, resource-efficiency practices and structured disclosure are converging into a broader capability system. Where sorting and processing infrastructure, certified recycled products, technical know-how and customer-facing credibility develop in tandem over time, ESG begins to resemble a strategic capability rather than a communication layer.

Path dependence deserves particular attention here. Strategic capabilities rarely emerge quickly. They are built through cumulative investment, experimentation, learning and interdepartmental coordination. Competitors may copy visible claims with relative ease; replicating years of technical refinement, process coordination, stakeholder trust and internal capability-building is far harder. ESG may therefore grow strategically stronger over time — precisely when it evolves alongside a company's routines and infrastructure rather than being introduced as a late-stage reputational response.

Caution is warranted, nonetheless. A capability that is rare today may become common tomorrow as regulation strengthens, customer expectations converge, or competitors invest aggressively. ESG advantage is dynamic rather than permanent. Firms that wish to preserve differentiation must continue deepening and renewing their sustainability capabilities. ESG, in other words, is not a one-time strategic achievement. It is an evolving

capability base — one that must be actively maintained and upgraded if it is to remain competitively meaningful.

iii. Natural-Resource-Based View and Manufacturing Strategy

Hart's natural-resource-based view extends the resource-based argument by placing the natural environment directly at the centre of strategic thinking (Hart, 1995). Where earlier resource-based frameworks tended to treat the environment as background, Hart argues that it had long been underdeveloped in management theory — and that competitive advantage can arise through pollution prevention, product stewardship and sustainable development (Hart, 1995). Few sectors illustrate this as clearly as manufacturing, where environmental performance is closely connected to materials, energy use, waste management, production design and long-term industrial adaptation.

Pollution prevention concerns the first dimension. It is about reducing waste, emissions and inefficiencies inside the production process — and its strategic importance follows directly from the fact that environmental waste is very often economic waste too. Lost materials, excess energy consumption and avoidable pollution increase cost, create regulatory exposure and erode operational resilience. For manufacturing firms, environmental efficiency has implications not only for compliance but for competitiveness itself.

Product stewardship is the second dimension, and it broadens the analysis considerably. Rather than stopping at the factory boundary, it asks firms to consider the environmental implications of products across their full lifecycle — design, use, durability and end-of-life treatment. Sustainability in many sectors is not determined solely by production inputs; it also depends on how products perform and circulate after sale. In the case of architectural aluminium systems, product stewardship carries particular weight because product sustainability connects directly to thermal performance, durability, building efficiency and the potential for circular material use.

Sustainable development goes further still. It is the question of whether a company's long-term growth model is compatible with ecological constraints and rising social expectations. Technical efficiency is not enough here. What is required is the capacity to align long-term business expansion with the realities of decarbonisation, resource pressure and institutional demand for accountability. In sectors such as aluminium, that alignment is difficult to separate from energy intensity, material sourcing and the transition toward more circular and lower-impact production systems. Growth that ignores these pressures is growth with compounding exposure.

What emerges from Hart's framework, when applied to the ALUMIL case, is a sharp reframing of what sustainability actually means in an industrial context. Renewable electricity use, water reuse, circular material flows and lower-impact product positioning are not environmental gestures. They may instead reflect efforts to build environmental capabilities that improve resilience, support customer value and prepare the firm for tighter future expectations. Sustainability, in this reading, is not external to industrial strategy — it becomes part of how the company manages operational exposure and long-term competitiveness.

iv. Stakeholder Theory and Legitimacy

Firms do not operate only through their internal resources and cost structures. They depend, equally, on relationships — with investors, employees, customers, suppliers, regulators, communities and strategic partners. Stakeholder theory adds this layer, and ESG becomes relevant within it precisely because it provides a structured way of communicating how the company manages issues that affect multiple stakeholder groups simultaneously.

Competitive position is shaped not only by price and product performance, but also by trust, legitimacy and relationship quality. Investors may focus on disclosure quality and governance standards. Customers may increasingly require evidence of sustainability performance and product traceability. Employees may care about inclusion, development, safety and organisational purpose. Regulators and capital-market institutions may emphasise transparency and accountability. None of these concerns is reducible to financial returns alone — and that is exactly why ESG can influence competitiveness even when the direct financial effects of a given initiative cannot be isolated easily.

ALUMIL occupies several stakeholder environments simultaneously. It is an industrial producer, a supplier to construction-related markets and a listed company in a capital-market context that increasingly acknowledges ESG visibility. Sustainability therefore functions not only as an internal operational issue but also as a relational and communicative one — shaping how the company is perceived by the very parties on whom its long-term success depends.

Legitimacy strengthens this interpretation. It concerns the perception that a company's actions are appropriate, credible and aligned with wider social and institutional expectations. ESG disclosures, third-party certifications and governance commitments can all support legitimacy by making company claims more visible and, in some cases, more verifiable. Where environmental and governance issues are under growing scrutiny, legitimacy functions as a strategic asset rather than a merely symbolic concern. It is worth pausing here to note that this is not a soft observation — a firm that loses perceived legitimacy faces higher cost of capital, weaker customer relationships and reduced regulatory goodwill.

Tension is also part of the picture. Different stakeholder groups do not necessarily value the same things in the same way. Investors may prefer standardised metrics and comparability. Customers may care more about certifications, product performance and technical credibility. Employees may focus on working conditions and inclusion. Regulators may emphasise formal compliance. A mature ESG strategy must therefore coordinate different forms of evidence and communication, rather than assuming a single message will satisfy all audiences equally.

Herein lies one reason why ESG cannot be reduced to branding. If claims are not supported by governance discipline, operational consistency and stakeholder-relevant evidence, legitimacy may weaken rather than strengthen. Stakeholder theory therefore complements the resource-based view by showing that capabilities must not only exist internally — they must also be recognised externally as credible and meaningful.

v. Shared Value and Strategic Fit

Porter and Kramer's concept of shared value is useful because it explains why some sustainability strategies are more strategically persuasive than others. Their central argument is that firms can create economic value in ways that also create value for society, particularly when they reconnect business success with social or environmental improvement (Porter and Kramer, 2011). What makes this perspective important is its rejection of two common but limiting framings: that sustainability is either a cost or a moral add-on. Instead, the question becomes whether sustainability is actually linked to the logic through which the company competes and creates value.

Not all environmental or social initiatives carry equal strategic weight. A company may support socially valuable causes, but if these remain detached from products, operations or value-chain productivity, their contribution to competitive advantage may be limited. Initiatives become more strategically meaningful when they improve product quality, strengthen efficiency, reduce risk or enhance the relevance of the company's offering in relation to broader environmental and social needs. Industrial firms, in particular, face this test with some regularity.

For ALUMIL, the shared-value logic is especially visible where environmental value overlaps directly with product value. Architectural aluminium systems can be associated with energy-efficient buildings, durability and material circularity; recycled aluminium can support lower environmental impact alongside product differentiation. Sustainability here is not something the company pursues in parallel with its core business. It becomes part of how the firm defines the value of its products and its relevance within the built environment.

Shared value also clarifies why strategic fit matters more than rhetorical scale. A narrower but deeply integrated sustainability initiative may create more strategic value than a broader but loosely connected programme. Fit improves coherence — and when sustainability is tied to the company's products, processes and innovation agenda, it becomes easier to justify investment, communicate relevance to stakeholders and sustain the initiative over time.

That said, shared value should not be romanticised. The relationship between social or environmental benefit and business gain is not always smooth or automatic. Some sustainability investments increase short-term costs, require complex coordination or produce benefits that are difficult to capture directly. The concept is therefore most useful when applied critically: as a way of identifying where sustainability and competitiveness genuinely reinforce one another, and where trade-offs remain unresolved.

vi. Circular Economy as Strategic Context

Of all the frameworks considered in this chapter, circular economy may be the most materially grounded. It links sustainability directly to materials, production systems and industrial competitiveness — and it does so in terms that are immediately relevant to the aluminium sector. The European Commission presents circularity as central to reducing pressure on natural resources, supporting climate goals and building a more resilient and

competitive Europe (European Commission, 2020). Circularity, then, is not simply a waste issue. It is an industrial strategy concerning how materials are designed, used, recovered and reintroduced into economic activity.

A common misunderstanding is to conflate circular economy with recycling alone. Recycling matters, but circularity is broader. It includes product durability, collection systems, sorting quality, high-value material reuse and the organisational capacity to keep resources circulating as effectively as possible. The strategic question is whether a firm builds the technical and organisational systems necessary to make circularity operational rather than simply rhetorical.

Aluminium makes this question particularly sharp. The metal is highly recyclable and can be reprocessed repeatedly without losing key properties. Better collection, sorting and recovery systems therefore carry both environmental and economic implications. European circular-economy discussions emphasise that improved circularity in aluminium can reduce emissions, lower dependence on virgin raw materials and support greater industrial resilience — especially in a context of concern over strategic raw materials and decarbonisation pressure (European Aluminium, 2022; European Commission, 2020).

The strategic importance of circularity also reaches into construction and the built environment. Building products are increasingly assessed not only by immediate technical function but also by lifecycle characteristics, traceability and their contribution to broader sustainability objectives. Recycled content and certified circularity can become commercially relevant rather than merely symbolic. They may support not only the producer's own sustainability profile, but also the needs of customers and project developers who must increasingly demonstrate sustainability performance within their own projects and value chains.

The implication for firms like ALUMIL is significant. Circular economy connects environmental responsibility with product relevance, resource efficiency, industrial resilience and customer-facing differentiation in a single analytical frame. Unlike more abstract sustainability concepts that may remain detached from operations, circularity directly engages with the material logic of the firm's activity. It is, in that sense, one of the strongest bridges between ESG and competitive strategy in the case under study.

vii. ESG, Competitive Advantage and the Risk of Greenwashing

Growing alongside the literature on ESG and strategy is a parallel concern: the risk that sustainability becomes performative rather than substantive. Competitive advantage cannot be built on communication alone. If environmental or social claims are exaggerated, weakly evidenced or inconsistent with a company's underlying practices, the result is reputational fragility rather than strategic strength. Greenwashing is therefore not only an ethical issue — it is a strategic one.

ESG has become highly visible, and that visibility changes the incentive structure facing firms. As sustainability grows in importance for investors, regulators and customers, the temptation to present an organisation in its most favourable light intensifies. Yet visibility can become vulnerability if claims cannot be verified or sustained over time. A company

may gain short-term approval through strong language, but long-term legitimacy depends on whether reporting, governance and operations actually support what is being communicated.

It is worth being direct about this distinction. Symbolic ESG relies heavily on narratives, slogans and selective disclosure. Capability-based ESG is more demanding: it requires evidence, organisational coordination, external verification where appropriate and consistency over time. The strongest sustainability strategies are not those with the broadest rhetoric, but those with the closest alignment between disclosed claims, operational reality and stakeholder expectations.

In sectors such as industrial materials and construction-related products, this distinction is particularly consequential. Professional customers and institutional actors increasingly expect traceability, technical documentation and credible evidence. Strong sustainability claims unsupported by verification may weaken competitiveness rather than strengthen it. The strategic implication is straightforward: ESG creates value not when firms simply say more, but when they can prove more.

viii. Synthesis of the Framework

What this chapter has developed is not a single argument but a layered one. ESG can contribute to competitive advantage — but only under specific conditions. It becomes strategically significant when embedded in valuable capabilities, linked to the core business model, relevant to stakeholder expectations and supported by credible governance and disclosure systems. These conditions help explain why some firms derive genuine strategic value from sustainability while others remain confined to compliance or symbolic positioning.

No single theory suffices on its own. The resource-based view explains the internal capability logic of ESG. Hart's natural-resource-based view highlights the strategic importance of environmental capability in manufacturing. Stakeholder theory explains why trust, legitimacy and communication matter beyond the balance sheet. Shared value clarifies why business-model fit determines whether sustainability actually strengthens competitiveness. Circular economy supplies the industrial and material context that is especially relevant to aluminium and construction-related activity. The literature on greenwashing introduces a necessary caution: sustainability claims can damage credibility if they are not supported by substantive practice.

For the purposes of this dissertation, the combined framework serves a specific purpose. It allows ALUMIL's ESG activity to be assessed neither too optimistically nor too sceptically. It avoids treating sustainability as automatically beneficial, but it equally avoids dismissing ESG as empty rhetoric from the outset. What it provides instead is a structured lens for examining whether the company's environmental initiatives, governance practices, reporting choices and product positioning suggest the development of a more substantive strategic capability. That lens now prepares the ground for the methodological and case-study analysis that follows.

3. Methodology

Qualitative inquiry suits this dissertation's purpose. The study adopts a single-case-study design to examine how ESG is integrated into the strategy of ALUMIL S.A. and how that integration may contribute to competitive positioning. No statistical hypothesis is being tested here, and no single measurable causal effect is being estimated. The aim, rather, is to interpret the strategic meaning of ESG within a specific organisational and sectoral context — to explain, to situate, and to analyse with some depth rather than to generalise numerically (Yin, 2018; Saunders, Lewis and Thornhill, 2019).

Case-study methodology is particularly well-suited to "how" and "why" questions about contemporary phenomena embedded in real-world settings (Yin, 2018). In the present study, ESG is not treated as an abstract variable stripped of context. It is examined as a strategic phenomenon — one shaped by regulation, industry characteristics, stakeholder expectations, company capabilities and corporate communication. Connecting these dimensions requires an approach that a purely cross-sectional quantitative design would struggle to provide (Yin, 2018). A case-study design enables precisely that kind of integration.

The case selected is ALUMIL S.A., a Greek listed company operating in the aluminium extrusion and architectural systems sector (ATHEX, n.d.). Several features make ALUMIL analytically suitable. Industrial production, international market presence and explicit ESG-related activity — circular-economy initiatives, recycled aluminium, sustainability reporting, governance disclosures — all converge in this one company (ALUMIL, 2023; ALUMIL, 2025a). What emerges from this picture is a case rich enough in information to examine how ESG might move beyond compliance and communication toward something more genuinely strategic.

Secondary data form the empirical backbone of the dissertation. Company-published sustainability material, Athens Exchange information, European Union policy documents and academic literature on strategy, sustainability and ESG constitute the main source types. Secondary data are fitting here because the research question concerns strategic interpretation and disclosed positioning rather than internal process measurement. That said, caution is required. Public corporate disclosures can be selective, tending to foreground positive performance and to treat unresolved weaknesses more quietly (Saunders, Lewis and Thornhill, 2019; Yin, 2018).

The present study takes the position that company material cannot be read as neutral fact. ALUMIL's disclosures are treated as case evidence and interpreted alongside external institutional and theoretical sources. Analytical distance, in other words, is a deliberate methodological choice — not an afterthought. In ESG research especially, where reputation, legitimacy and communication are themselves part of the phenomenon under investigation, this distance matters considerably (Bhandari, Ranta and Salo, 2022).

Analysis follows a thematic logic. Evidence is organised under four broad case-study themes: ESG strategy, innovations and initiatives, competitive advantage, and challenges and management. Short description, then interpretation. The structure also enables a systematic comparison between ALUMIL's disclosed activities and the theoretical

concepts developed in the previous chapter, particularly the resource-based view, the natural-resource-based view, stakeholder theory, shared value and circular-economy strategy (Barney, 1991; Hart, 1995; Porter and Kramer, 2011; Lichtenthaler, 2022).

Taken together, this methodology is designed to produce a context-sensitive, analytically balanced account of ESG as strategy in the case of ALUMIL. Universal generalisability is not claimed, and precise causal measurement is not attempted. The purpose is to examine whether the company's ESG-related activities appear strategically meaningful when interpreted through established theoretical lenses and external contextual evidence (Yin, 2018; Saunders, Lewis and Thornhill, 2019).

i. Research Philosophy and Approach

An interpretivist philosophy underpins this dissertation. Interpretivism is appropriate where the aim is to understand meanings, relationships and context rather than to uncover universal causal laws in the positivist sense (Saunders, Lewis and Thornhill, 2019). How does ESG contribute to ALUMIL's competitive positioning? Answering that question requires interpretation — because competitive positioning is shaped not only by measurable outcomes but also by organisational narratives, stakeholder expectations, institutional pressures and strategic framing.

It is worth noting that this philosophical stance does not diminish the importance of factual evidence. Company disclosures, Athens Exchange documentation and European policy sources all contribute factual material. Yet these data do not simply "speak for themselves." They require interpretation in order to yield strategic meaning. The existence of a recycled aluminium initiative, for instance, is a factual matter; whether it constitutes a differentiation mechanism, a legitimacy signal or a resource-based capability is an interpretive question (ALUMIL, 2023; Barney, 1991).

The dissertation combines deductive and limited inductive elements. Deductive in structure: analysis begins from established theoretical frameworks — the resource-based view, the natural-resource-based view, stakeholder theory and shared value (Barney, 1991; Hart, 1995; Porter and Kramer, 2011). These frameworks guide interpretation. Inductive in texture: recurring themes in ALUMIL's disclosures — recycled aluminium, circular economy, ESG reporting, ATHEX ESG visibility — inform how the case analysis is structured. The overall approach is therefore best described as theoretically informed qualitative interpretation rather than pure induction or pure deduction (Saunders, Lewis and Thornhill, 2019).

ii. Case Study Design

Single-case design was chosen deliberately. The purpose of this dissertation is not to compare many firms superficially but to examine one organisation in depth. Single cases are appropriate when the selected case is information-rich, contextually relevant and capable of illuminating a broader theoretical issue (Yin, 2018). ALUMIL meets these conditions: it operates in a sector where sustainability is materially significant, and its publicly visible ESG initiatives can be meaningfully examined in relation to strategic theory (ATHEX, n.d.; ALUMIL, 2025a).

Contextual richness is where this design earns its value. Sector, products, market setting, ESG disclosures, innovation activity — all of these can be connected to broader questions of competitive advantage in a way that a large-sample quantitative study simply could not replicate. Patterns across firms might be identified through such a study, but the how and the why — how sustainability becomes strategically meaningful within a specific business model and industrial context — would be harder to explain (Yin, 2018).

The design has limits, and these should be acknowledged honestly. A single case cannot support statistical generalisation to all Greek companies or all manufacturing firms. ALUMIL's resources, market position and organisational history may differ substantially from those of smaller firms, service firms or companies in other sectors. The value of this case therefore lies in analytical generalisation — its capacity to contribute to theoretical understanding rather than to population-level claims (Yin, 2018).

iii. Data Collection

Documentary secondary data form the entire empirical base of this study. Company sources include ALUMIL's sustainability pages, sustainability-report hub, ESG report communication and announcements relating to recycled aluminium and circular-economy initiatives (ALUMIL, n.d.-a; ALUMIL, n.d.-b; ALUMIL, 2023; ALUMIL, 2025a). These materials reveal how the company presents its sustainability priorities, product innovations, governance commitments and ESG identity — which is itself evidence of strategic intent.

External documentary sources provide context and partial verification. Athens Exchange material covers ALUMIL's listing status, sector classification and the institutional relevance of ESG disclosure within the Greek capital-market environment (ATHEX, n.d.; ATHEX, 2021; ATHEX, 2024). European Commission sources establish the regulatory background for corporate sustainability reporting, due diligence and circular economy (European Commission, 2020; European Commission, 2024; European Commission, 2025). Contextual evidence on circular-economy developments and the Greek economic setting comes from the European Environment Agency and the European Stability Mechanism respectively (European Environment Agency, 2025; European Stability Mechanism, 2025).

Academic sources provide the conceptual tools for interpreting the case. Barney (1991) supports the analysis of ESG-related resources and capabilities; Hart (1995) frames environmental strategy in manufacturing contexts; Porter and Kramer (2011) inform the discussion of shared value and strategic fit. More recent sustainability literature supports interpretation of ESG embeddedness, credibility and system-level integration (Bhandari, Ranta and Salo, 2022; Lichtenthaler, 2022).

The source mix reflects the nature of the research question. Investigating how ESG may strengthen competitive position requires not only technical or financial evidence but also policy context, strategic concepts, company communication and market-signalling mechanisms. Secondary documentary evidence is well suited to this task, provided its strengths and limitations are stated clearly (Saunders, Lewis and Thornhill, 2019).

iv. Data Analysis

Thematic analysis was used to work through the evidence. The approach is appropriate for qualitative research because it allows recurring patterns to be identified, evidence to be grouped into meaningful categories, and relationships between themes and theoretical concepts to be interpreted (Saunders, Lewis and Thornhill, 2019). In the first stage, recurring ESG-related topics were identified across company and external sources — recycled aluminium, circular economy, renewable electricity, water reuse, governance visibility, employee indicators, sustainability reporting and ESG index participation.

The second stage grouped these topics into the four broader case-analysis categories used in Chapter 4: ESG strategy, innovations and initiatives, competitive advantage, and challenges and management. Organisation around strategic questions rather than chronology or description was a deliberate choice. It kept the analysis oriented toward the research aim rather than toward a narrative summary of corporate disclosures.

The third stage connected the themes to the theoretical framework. Recycled aluminium and sorting infrastructure were interpreted through the resource-based view as possible capability-building mechanisms (Barney, 1991; ALUMIL, 2023). Renewable electricity and water reuse were read through the natural-resource-based view, given their relationship to pollution prevention and operational environmental efficiency (Hart, 1995; ALUMIL, 2025a). ESG reporting alignment and ATHEX ESG visibility were interpreted partly through stakeholder theory, because they bear on legitimacy, transparency and investor perception (ATHEX, 2021; ALUMIL, 2025a). Product energy performance and circularity were also examined through the shared-value lens, connecting business value with environmental and customer value (Porter and Kramer, 2011; European Commission, 2020).

The analysis is qualitative and interpretive throughout. No scores are assigned to ALUMIL's ESG performance, and no attempt is made to replicate formal ESG rating methodologies. This is intentional. Publicly available evidence is not sufficient to generate a fully robust comparative ESG score, and such a score would not in any case answer the dissertation's central strategic question. The aim is to interpret strategic relevance — not to construct a ranking.

v. Reliability, Validity and Trustworthiness

In qualitative research, reliability is better understood as transparency and procedural consistency than as exact replicability of wording or interpretation (Saunders, Lewis and Thornhill, 2019). Main source categories are identified clearly, analytical stages are explained, and interpretive claims are linked to documentary evidence. The structured thematic framework further supports consistency by applying the same analytical categories throughout the case discussion.

Validity is strengthened through triangulation. Company claims are not treated as sufficient in isolation. Rather, they are placed alongside academic theory, Athens Exchange documentation and European policy material in order to assess whether they are contextually credible and strategically meaningful (Yin, 2018). ALUMIL's presence in the

ATHEX ESG environment, for instance, is not discussed merely as a company statement; it is considered in relation to the published methodology and eligibility logic of the ATHEX ESG Index (ATHEX, 2021).

Trustworthiness also rests on cautious inference. The dissertation does not claim that ESG has definitively caused specific increases in profitability, valuation or market share. Such conclusions would require primary data, longitudinal financial evidence or a different research design entirely. What the study argues, instead, is that ESG may contribute to competitive position through plausible mechanisms — differentiation, legitimacy, regulatory readiness, resource efficiency and innovation. That more careful form of inference is important for academic credibility (Yin, 2018; Saunders, Lewis and Thornhill, 2019).

One further point about trustworthiness deserves mention. Corporate sustainability communications are self-presentational texts. They reflect what the company chooses to highlight and how it wishes to be perceived. Recognising this does not invalidate the material — it frames how the material should be read. Company documents in this dissertation are treated simultaneously as sources of factual information and as objects of strategic interpretation.

vi. Ethical Considerations

Publicly available secondary data are the sole empirical source. No human participants were involved, no interviews were conducted, and no personal data were collected. The ethical issues associated with informed consent, anonymity or participant protection in fieldwork-based research therefore do not arise here. Academic integrity does remain a responsibility, nonetheless — accurate representation of sources and avoidance of plagiarism are obligations that apply regardless of research design (Saunders, Lewis and Thornhill, 2019).

A specific ethical issue in ESG research is the risk of reproducing corporate claims uncritically. Sustainability communication often carries reputational value; the researcher must therefore maintain analytical distance and distinguish clearly between what a company states and what the available evidence can reasonably support. Throughout the dissertation, cautious language is used when discussing company claims, and company sources are consistently complemented by external institutional and academic material (Bhandari, Ranta and Salo, 2022).

Overclaiming is also something the study seeks to avoid. ALUMIL's ESG disclosures are not presented as definitive proof of strategic success, and the full internal reality of the organisation is not claimed to be visible from public sources alone. Exaggerated academic conclusions can misrepresent both the company and the evidential basis of the study. A balanced, transparent account is therefore not merely a methodological preference — it is part of the ethical standard to which the dissertation holds itself.

vii. Limitations of the Methodology

Four limitations deserve honest acknowledgement. The first and most significant is the absence of primary data. No interviews were conducted with managers, employees, customers, suppliers or investors. How ESG is understood internally, how it influences day-to-day decision-making, how external stakeholders actually evaluate ALUMIL's sustainability position — none of these can be directly examined through public disclosures alone (Yin, 2018).

Second, there is no direct causal financial analysis. Plausible links between ESG and competitive advantage are discussed, but the study does not test whether specific ESG initiatives have increased profitability, improved margins, raised valuation or generated measurable sales outcomes. That kind of analysis would require internal company data, a different research design and probably a longer time horizon. Conclusions should therefore be read as strategic and analytical rather than econometric.

Third, public disclosures are selective by nature. Reporting choices, communication priorities and reputational considerations all shape what companies choose to publish. Weaknesses, trade-offs and implementation difficulties may receive considerably less attention than achievements. In retrospect, this is a limitation common to almost all desk-based case-study research — which is precisely why triangulation and careful interpretive wording are so important in the analysis.

Fourth, ESG is a fast-moving field. Regulation, reporting standards and company practices evolve quickly. EU sustainability requirements are still developing, and ALUMIL's own disclosures and initiatives may change after the time of writing. The dissertation should be understood as a structured interpretation of evidence available during the study period, not as a permanent account of the company's ESG position (European Commission, 2025).

Despite these limitations, the methodology remains appropriate for what the dissertation sets out to do. The aim is not to produce a final causal verdict on ESG performance. It is to provide a theoretically grounded and contextually informed interpretation of how ESG may function as strategy in the case of ALUMIL S.A. Within those boundaries — clearly stated and consistently observed — the methodological design is coherent with the research question and sufficient for an MBA-level qualitative dissertation (Yin, 2018; Saunders, Lewis and Thornhill, 2019).

4. Case Study Analysis

This chapter examines ALUMIL S.A. as a case study of how ESG may function as a strategic rather than purely symbolic corporate orientation. The analysis focuses on the relationship between the company's public sustainability disclosures, its operational initiatives and the possible implications of these actions for competitive positioning. Since the available evidence is primarily documentary and public, the chapter adopts a cautious interpretive approach. Company claims are treated as relevant case evidence, but not as self-sufficient proof of strategic success.

The choice of ALUMIL is analytically appropriate because the company operates in a sector where sustainability issues are materially significant. As a listed issuer on the Athens Stock Exchange in the Basic Resources / Aluminum subsector, ALUMIL faces a business environment in which resource efficiency, environmental credibility, governance quality and stakeholder transparency can all influence legitimacy and market perception. In addition, the company's products are linked to the built environment, where energy performance, durability and circularity are increasingly relevant to customers and regulators.

Strategic Profile of ALUMIL

ALUMIL is a useful case because it combines industrial production, international business activity and direct exposure to sustainability-related material issues. The company's sector makes ESG particularly relevant, since aluminium production and processing are closely associated with energy use, emissions, recycling potential and the environmental profile of downstream applications. Unlike firms in sectors where sustainability may remain largely reputational, ALUMIL operates in a context in which environmental performance can affect both operations and product-market positioning.

The company's listing status also increases the importance of ESG visibility. The ATHEX ESG Index is designed to track issuers on the regulated market based on their ESG transparency score, and inclusion depends on formal eligibility criteria linked to disclosure and scoring. This makes ESG not only a management issue but also part of the firm's interface with investors and the wider capital-market environment.

A further dimension of ALUMIL's strategic profile is the connection between its products and building performance. Architectural aluminium systems contribute to building-envelope quality, durability and energy-related functionality, even if they are only one part of a wider technical system. This means that sustainability can potentially be integrated into ALUMIL's value proposition through both material circularity and use-phase relevance, which gives the company more strategic room than a business whose ESG claims are disconnected from product utility.

i. 4.1 ESG Strategy

ALUMIL's ESG strategy appears to be presented as a multi-dimensional framework that combines environmental action, social indicators, governance practices and innovation. In its ESG communication, the company highlights renewable electricity use, water reuse, recycled aluminium, workforce indicators, training, anti-corruption commitment and female board representation. This suggests an attempt to frame ESG as part of an organised strategic identity rather than as a narrow compliance checklist.

The environmental dimension is the most clearly connected to the company's core business model. ALUMIL's public material places particular emphasis on circularity, lower-carbon aluminium profiles and environmental efficiency in production, which are all directly relevant to a manufacturing company in the aluminium systems sector. This is strategically important because ESG tends to create stronger competitive implications when it is linked to the firm's productive capabilities and commercial offering rather than remaining limited to philanthropy or generic reporting.

At the same time, the strategy should not be accepted uncritically at face value. Public ESG framing shows how the company wishes to be perceived, but it does not by itself prove the depth of internal integration or the full strategic effect of the initiatives. The analytical issue is therefore not simply whether ALUMIL communicates ESG, but whether the disclosed actions indicate embedded capabilities, credible governance and a meaningful link between sustainability and competitive positioning.

The governance side of the strategy strengthens the credibility of the wider ESG narrative. ALUMIL's 2024 ESG communication refers to a zero-tolerance corruption policy and 40% female representation on the board, while also presenting transparency as a central principle. Governance matters here because without credible oversight and disclosure discipline, environmental and social claims can easily be interpreted as impression management rather than evidence of organisational seriousness.

There is also a regulatory-readiness aspect to the strategy. ALUMIL states that its 2024 ESG report is aligned with the ESRS and the CSRD, which suggests an effort to adapt early to the evolving European sustainability reporting framework. This is strategically relevant because regulatory preparedness can strengthen a firm's legitimacy, reduce future adaptation pressure and improve its ability to communicate comparably with investors and business partners.

ii. 4.2 Innovations and Initiatives

The strongest ESG-related initiative in the case is ALUMIL's development of certified recycled aluminium products. The company announced that it had received TÜV AUSTRIA "OK Recycled" certification for billets with 60% recycled aluminium used in all profiles of its architectural systems. This is an important point because third-party verification increases the credibility of sustainability claims and reduces the risk that environmental language remains purely promotional.

The strategic value of this initiative lies not only in the claim itself but in the capability structure behind it. ALUMIL reports that it established a state-of-the-art aluminium scrap sorting and processing unit at its Kilkis facilities, representing an investment of €4.6 million. This indicates that circularity is being translated into operational infrastructure, which is more consistent with long-term capability building than with superficial sustainability branding.

The Loop 60 and Loop 80 product lines further extend this logic into market positioning. According to the company's sustainability material, Loop 60 contains at least 60% recycled aluminium and Loop 80 at least 80%, with both lines certified by TÜV Austria. By giving recycled content a distinct product identity, ALUMIL appears to be converting an environmental attribute into a recognisable commercial proposition.

This move is significant because ESG becomes more strategically useful when sustainability can be translated into terms that matter to customers and specifiers. In construction-related markets, product differentiation often depends on documentation, technical performance, certification and compatibility with broader sustainability goals in projects. In that sense, certified recycled aluminium may serve not only as an

environmental improvement but also as a market-signalling device that helps the company communicate seriousness, quality and future relevance.

ALUMIL also links product sustainability to building performance. The company presents its architectural systems as contributing to energy savings and carbon-emission reductions, while positioning Loop products within a broader low-impact building narrative. These claims should be interpreted with caution because actual building performance depends on design choices, installation quality and other technical variables, but the strategic direction is clear: the company is trying to connect environmental improvements in materials to customer value in use.

Beyond materials, ALUMIL's 2024 ESG communication highlights that 66% of electricity consumption came from renewables and that 59% of water was reused. These figures are analytically important because they point to operational environmental management rather than product messaging alone. Even though public figures do not prove the full cost or efficiency impact of these practices, they suggest that the firm is attempting to embed sustainability in the production system itself.

iii. 4.3 Competitive Advantage

The case suggests that ESG may strengthen ALUMIL's competitive position through multiple and mutually reinforcing channels. The first is differentiation. Certified recycled aluminium, branded Loop products and the connection between sustainability and energy-related building applications provide the company with a more specific and commercially legible sustainability proposition than a generic ESG statement would offer.

The second channel is credibility and legitimacy. Third-party certification, disclosed environmental metrics and visible participation in the ATHEX ESG environment all help support the perception that sustainability is more than rhetorical positioning. In markets where investors, project partners and professional customers increasingly expect traceable ESG evidence, this kind of credibility can itself become a competitive asset.

A third channel is regulatory and market readiness. ALUMIL's emphasis on ESRS and CSRD alignment suggests that the company is preparing for a business environment in which sustainability reporting and transparency will become more formalised and consequential. This does not prove a direct financial return, but it does indicate preparedness, which can reduce adjustment costs and strengthen institutional trust over time.

A fourth channel is operational resilience. The investment in scrap processing, the use of recycled content, renewable electricity and water reuse can all be interpreted as efforts to reduce exposure to resource constraints and environmental pressure. In sectors dependent on materials and energy, such capabilities may improve strategic resilience even when short-term financial effects are not fully visible from public data.

However, the evidence should not be overstated. Public disclosures do not allow a definitive conclusion that ESG has caused higher profitability, stronger margins or superior market share for ALUMIL. What they do support is a more modest but

academically defensible claim: the company appears to be building a set of sustainability-related capabilities and signals that may plausibly strengthen differentiation, legitimacy, preparedness and resilience.

iv. 4.4 Challenges and Management

Despite these positive indications, the case also reveals important strategic and managerial challenges. First, ESG integration requires investment in infrastructure, reporting systems, certifications, workforce development and governance mechanisms. This means that sustainability cannot simply be assumed to create advantage; it must generate value in ways that justify its organisational and financial demands.

Second, the case is constrained by the nature of public evidence. Much of what is known about ALUMIL's ESG strategy comes from the company's own sustainability and corporate communication. Such sources are useful and necessary, but they are also selective and self-presentational, which means they may emphasise achievements more strongly than implementation difficulties, trade-offs or unresolved weaknesses.

Third, there is an ongoing credibility challenge associated with ESG communication itself. As sustainability becomes part of competitive positioning, the risk of greenwashing grows unless claims are consistently supported by verifiable data, third-party assurance and stable performance over time. ALUMIL's certified recycled aluminium is a strong example of evidential support, but wider ESG credibility depends on whether similar discipline extends across the whole sustainability agenda.

A further challenge concerns strategic consistency. ESG can only function as a durable competitive factor if environmental, social and governance practices are integrated across operations, products, reporting and decision-making rather than treated as parallel initiatives. If sustainability remains fragmented, the company may achieve communication benefits without building the deeper organisational capabilities required for long-term advantage.

Finally, there is a measurement problem. Public ESG indicators provide useful signals, but they do not automatically resolve the question of material strategic impact. A company may disclose high-quality ESG information and still face uncertainty over how much those practices influence customer choice, pricing power, employee retention or investor valuation. For this reason, the strategic importance of ALUMIL's ESG activity should be understood as plausible and evidence-based, but not conclusively quantified by the available data.

5. Analysis and Discussion

This chapter interprets the ALUMIL case through the theoretical framework developed earlier in the dissertation. The purpose is not to repeat the company's disclosed ESG activities, but to examine what those activities suggest about the relationship between sustainability and competitive positioning. The discussion moves from case evidence to theoretical interpretation, with particular attention to the resource-based view, the natural-

resource-based view, stakeholder theory, shared value and the strategic logic of circular economy.

The central argument emerging from the case is that ESG appears most strategically meaningful when it is connected to ALUMIL's core industrial capabilities — not when it is treated as a separate reputational layer. Recycled aluminium, scrap-processing infrastructure, renewable electricity use, water reuse and energy-relevant architectural systems all relate directly to how the company produces, improves and positions its products. This connection matters. It indicates that ESG in this case is not confined to philanthropic language or reporting formality, but is at least partly embedded in operations and market-facing activity.

The analysis must remain cautious, however. The available evidence is based largely on public corporate disclosure and external institutional context, which means that the study can identify plausible strategic mechanisms without being able to conclusively prove internal causality or financial effect. The value of the discussion lies in analytical interpretation: examining whether ALUMIL's ESG activity appears strategically coherent, theoretically grounded and potentially relevant to competitive advantage.

i. ESG as a Strategic System

A major insight from the case is that ESG is better understood as a strategic system than as a checklist of isolated practices. ALUMIL's environmental initiatives, governance disclosures, product positioning and reporting choices appear most meaningful when interpreted together rather than separately. Certified recycled aluminium, for example, derives strategic significance not only from material content, but from the infrastructure behind it, the external verification attached to it, the governance systems needed to disclose it and the customer relevance that gives it commercial meaning.

This systemic interpretation is consistent with the idea that sustainability advantage is built through interdependent organisational elements rather than through one-off actions. Renewable electricity and water reuse contribute to environmental performance, but their strategic value depends on whether they are connected to broader operational discipline and credible reporting. Similarly, governance indicators such as anti-corruption commitments and female board representation strengthen the wider ESG architecture as they support the credibility of the company's environmental and social narrative.

For ALUMIL, then, ESG is strongest when it functions as an organising logic across products, operations, governance and stakeholder communication. Fragmented sustainability may still produce positive signals, but it is unlikely to create durable strategic value. The company's challenge is not simply to expand the number of ESG initiatives; it is to ensure they reinforce one another in a coherent and cumulative way.

ii. Interpretation Through the Resource-Based View

The resource-based view helps distinguish between ESG as communication and ESG as capability. From this perspective, the strategic question is whether ALUMIL possesses sustainability-related resources and routines that are valuable, relatively uncommon,

difficult to imitate and relevant to market needs. Public ESG language alone would not satisfy these conditions as reports and general commitments can be copied relatively easily by competitors.

Some of ALUMIL's disclosed initiatives, by contrast, appear closer to capability-building. The investment in a €4.6 million scrap sorting and processing unit signals an operational commitment that goes well beyond symbolic positioning. The TÜV AUSTRIA certification of recycled aluminium also shows that the company is not simply making an environmental claim; it is building a verifiable proposition supported by process control, product consistency and external assurance.

From a resource-based perspective, these features may support differentiation in ways that are not instantly replicable. A competitor can adopt sustainability language quickly. Replicating infrastructure, certification pathways, process know-how and market credibility is a far more demanding undertaking. This does not mean the advantage is permanent — far from it. But it does indicate that ALUMIL's most strategically significant ESG resources are those tied to operational learning and product capability, not general communication.

The resource-based view also introduces an important caution. A capability creates advantage only if it remains strategically valuable relative to market conditions and competitor behaviour. If recycled-content products become an industry norm, then recycled aluminium alone may cease to differentiate the firm and become instead a minimum expectation. In that scenario, advantage would depend on who delivers better certified quality, stronger technical support, lower lifecycle impact, more credible documentation or tighter integration with customer needs. The case, for this reason, supports a dynamic interpretation of ESG capability over a static one.

iii. Interpretation Through the Natural-Resource-Based View

The natural-resource-based view is especially relevant because ALUMIL operates in a material- and energy-intensive industrial context. What the case shows is that environmental considerations are not external constraints added onto strategy, but part of the strategic environment in which the company competes. Renewable electricity use, water reuse, recycled aluminium and circular-economy infrastructure can all be read as environmental capabilities with real strategic implications.

The pollution-prevention logic is visible in the company's reported renewable electricity use and water reuse performance. These practices point to an effort to improve environmental efficiency in operations — and that may also support resilience under conditions of energy volatility, regulatory tightening and stakeholder scrutiny. Public evidence does not allow a detailed cost-benefit calculation, but the strategic reasoning is persuasive: firms that manage operational environmental pressures more effectively are likely better prepared for the industrial conditions ahead.

Product stewardship is another dimension visible in ALUMIL's emphasis on recycled content and energy-relevant architectural systems. The company's sustainability relevance does not stop at the factory gate. Its products enter buildings, where durability, thermal

performance and material circularity all become part of customer value. There is, as a result, a plausible basis for linking environmental strategy to product strategy, which is one of the stronger signs that sustainability is becoming embedded in the business model.

At the broadest level, the case also reflects the sustainable-development element of the natural-resource-based view. ALUMIL's ESG framing, reporting alignment and circular-economy orientation suggest an attempt to position growth within a wider framework of environmental and governance responsibility. Whether this becomes a fully developed long-term strategic architecture remains uncertain, but the case shows that the company is engaging with environmental strategy in ways that are materially relevant to its sector.

iv. Interpretation Through Stakeholder Theory

Stakeholder theory helps explain why ESG matters even when its financial effects are not directly quantifiable. ALUMIL does not operate through products and prices alone — it depends on relationships with investors, customers, employees, regulators, certification bodies and wider communities. ESG functions partly as a structured language for managing these relationships and responding to their increasingly formalised expectations.

For investors and the capital market, participation in the ATHEX ESG environment and alignment with formal reporting frameworks can signal transparency, seriousness and readiness. The ATHEX ESG Index operates around ESG scoring and eligibility criteria, which means sustainability visibility has entered the Greek listed-company environment in a structured form — not merely as an informal reputational issue. This alone does not create market advantage, but it does make ESG part of how listed firms are observed and compared.

For customers, ESG becomes relevant when it is translated into practical evidence that supports procurement or project decisions. Certified recycled aluminium, product-level circularity branding and sustainability-linked technical messaging can help ALUMIL respond to customers who increasingly need environmental documentation for their own commercial, architectural or regulatory reasons. The company's ESG strategy may, in this way, create value not only for itself but also for downstream partners who rely on supplier evidence in their own sustainability positioning.

For employees and internal stakeholders, ESG can influence organisational trust and commitment when it is linked to training, inclusion, governance quality and a credible sense of long-term direction. ALUMIL's disclosed social indicators do not prove a full internal cultural transformation, but they do show that human-capital issues are part of the company's ESG frame. And this matters: a sustainability strategy that ignores employees would be operationally very difficult to embed in a manufacturing setting.

But stakeholder theory also surfaces a challenge. Different groups value different forms of ESG evidence. Investors may prefer standardised metrics, customers may want product-specific certifications, regulators may focus on compliance, and employees may care more about fairness, safety and development. ALUMIL cannot, for this reason, treat ESG as a single-message communication exercise. A mature stakeholder strategy requires differentiated evidence, consistent governance and responsiveness to multiple audiences simultaneously.

v. Greek Business Implications

The case has broader relevance for the Greek business environment. Greece's recovery and renewed investment confidence create opportunities, but firms still operate under pressure to modernise, internationalise and demonstrate credibility in a demanding European context. In this setting, ESG can become part of a broader competitiveness agenda — particularly for listed and export-oriented companies that must communicate with international stakeholders and adapt to European regulatory expectations.

ALUMIL is particularly useful here because it shows that ESG in Greece need not be treated only as an imported compliance burden. In this case, sustainability is connected to materials, production systems, product differentiation and export relevance. That is an important lesson for other Greek companies: ESG becomes strategically persuasive when it is translated into sector-specific capabilities, not adopted as generic external vocabulary.

Yet the Greek context also highlights real limits. Not all companies will have the resources to build advanced recycling infrastructure, sophisticated reporting systems or certified product platforms. Smaller firms face capacity constraints, and some domestic markets remain heavily price-driven. The strategic implication is that ESG development in Greece will likely require stronger institutional support, professional guidance and sector-specific adaptation — there is no uniform model that will work for all firms.

The ATHEX ESG Reporting Guide is relevant here. It shows that parts of the Greek market infrastructure are already attempting to support companies in navigating ESG disclosure and alignment. ESG is becoming institutionalised not only through EU regulation but also through domestic capital-market mechanisms, which may gradually influence how Greek companies define business quality and strategic readiness.

vi. The Boundary Between Compliance and Strategy

One of the most important analytical themes in this dissertation is the distinction between compliance and strategy. Compliance concerns meeting reporting obligations, disclosure standards and governance expectations. Strategy concerns the use of sustainability to shape resources, product positioning, stakeholder confidence and long-term competitiveness. The two are related, but they are not the same thing.

ALUMIL appears to be operating in both domains at once. Alignment with ESRS and CSRD indicates attention to the compliance dimension of ESG, while the recycled aluminium proposition and the scrap-processing investment indicate movement toward strategic integration. This distinction is worth dwelling on, because many companies may satisfy disclosure requirements without creating any meaningful competitive benefit — whereas stronger firms use the reporting agenda to reinforce operational learning and market differentiation.

Reporting is, in short, necessary but not enough on its own. A company that reports well without changing products, processes or governance depth may protect legitimacy in the short term, but it is unlikely to build durable strategic advantage. When ESG reporting is

instead linked to product innovation, process capability and stakeholder value, the boundary between compliance and strategy shifts in a meaningfully different direction.

This is also where greenwashing risk becomes analytically important. The more ESG is used as a strategic message, the more necessary it becomes to anchor that message in verifiable evidence. ALUMIL's strongest disclosed example of this is the certified recycled aluminium initiative, supported by third-party verification and real operational infrastructure. The broader lesson is that strategic ESG must remain evidence-led if it is to preserve legitimacy over time.

vii. Practical Implications for ALUMIL

The analysis points to several practical implications for ALUMIL. First, the company should continue deepening the connection between circularity and customer value. Recycled content becomes strategically useful not simply because it exists, but because customers understand why it matters for their own project requirements, sustainability targets and procurement logic. Product documentation, certification clarity and technically credible communication are therefore important competitive tools.

Second, ALUMIL should continue improving ESG data consistency and trend visibility. Single-year indicators can support positive signalling, but long-term strategic credibility depends on the ability to demonstrate progress, stability and transparency over time. As ESG reporting expectations become more formalised, stronger data systems will improve both compliance and managerial learning.

Third — and this is arguably the most operationally demanding implication — the company should embed ESG in commercial and cross-functional routines, not treat it as a specialised reporting domain. Sustainability-related product claims must be understood not only by reporting teams, but also by sales staff, procurement professionals, engineers and senior managers. Without that cross-functional ownership, ESG will influence competitive positioning in a declarative way only, not a practical one.

Fourth, the company should remain disciplined in sustainability communication. Strong communication is specific, evidence-based and proportionate. Weak communication relies on vague ambition claims. In a context of increasing ESG scrutiny, strategic credibility depends partly on the willingness to communicate both achievements and limitations honestly.

viii. Overall Discussion

Looking at the findings collectively, they support a qualified but positive conclusion: ESG appears capable of strengthening ALUMIL's competitive position when it is embedded in industrial capability, product relevance and stakeholder-facing credibility. The company's strongest sustainability-related features are those tied to circular materials, verified recycled content, resource-efficiency practices and the strategic relevance of its building-system applications. These are the areas where sustainability most clearly overlaps with the logic of competitive strategy.

The case also shows, however, that ESG advantage is not automatic — it is conditional. It depends on sustained capability-building, credible governance, disciplined communication and continued alignment with customer and regulatory expectations. This dissertation does not conclude that ESG guarantees superior performance. It concludes that ALUMIL appears to be developing a set of sustainability-related resources and signals that can plausibly strengthen differentiation, resilience, legitimacy and preparedness.

This conclusion is theoretically consistent with the dissertation's broader framework. It aligns with the resource-based idea that advantage comes from embedded and difficult-to-copy capabilities, with the natural-resource-based view that environmental strategy matters deeply in manufacturing contexts, and with stakeholder theory's emphasis on legitimacy and relationship quality. It also supports the shared-value perspective, because ALUMIL's strongest ESG initiatives are those that link environmental value with commercial and product relevance — not abstract social signalling.

In that sense, the ALUMIL case contributes to a wider understanding of how ESG may function in Greek industry. Sustainability becomes strategically meaningful when it is translated into material capabilities, externally credible claims and practically relevant value propositions. The challenge for the company — and for similar firms — is to keep moving from sustainability communication toward sustainability capability.

6. Conclusions

At its core, this dissertation set out to examine how integrating ESG principles into ALUMIL S.A.'s strategy might contribute to the company's competitive positioning — both in Greece and across international markets. What emerges from this analysis is a central finding that ESG carries the most strategic value when it is genuinely connected to core industrial capabilities, product characteristics and stakeholder relationships. It matters considerably less when treated purely as a reporting or communication exercise. In ALUMIL's specific context, sustainability is closely — and quite naturally — linked to recycled aluminium, circular-economy capability, energy-relevant architectural systems, governance credibility and a growing alignment with European reporting expectations.

ESG can strengthen ALUMIL's competitive position through several interrelated pathways, as the analysis makes clear. Differentiation is one such pathway: certified recycled content and a more legible sustainability proposition may allow the company to stand apart in construction-related markets. Resilience is another — greater attention to resource efficiency, renewable electricity use, water reuse and circular material flows all contribute here. And then there is legitimacy, which can be reinforced through more visible governance practices, structured reporting and active participation in the broader ESG environment of the Greek capital market.

A cautious conclusion, nonetheless, seemed appropriate. ESG can contribute to competitive positioning — the available evidence supports this. What it does not support is any direct causal claim about profitability, valuation or market share. The study relies mainly on public documentary material. For that reason, the findings should be read as theoretically grounded and strategically plausible rather than financially conclusive. This distinction matters.

Taken together, these findings answer the central research question positively — but with qualification. When sustainability is genuinely embedded in operations, products, governance and stakeholder communication, integrating ESG principles into ALUMIL's strategy appears capable of meaningfully strengthening its competitive position. ESG is best understood here not as an external obligation, but as a developing strategic capability — one that can support differentiation, legitimacy and long-term readiness.

i. Main Findings

Perhaps the most fundamental finding is that ESG is most valuable when it is tied directly to the core business model. For ALUMIL, the strongest strategic connection runs between circular aluminium, product performance in buildings and operational environmental management. Initiatives such as certified recycled aluminium and scrap-processing investment carry real strategic weight precisely because of that connection — generic sustainability language, by contrast, carries very little.

Credibility matters as much as ambition. That is the second main finding. Third-party verification, structured ESG reporting and governance indicators all work to close the gap between claim and evidence, thereby strengthening the company's sustainability narrative. ALUMIL's recycled aluminium certification and its ESG reporting alignment are, in this light, more persuasive than broad corporate statements could ever be on their own.

Third — and worth stating plainly — ESG advantage is conditional, not automatic. It depends on continued investment, internal coordination and credible communication, but also on stakeholder relevance and the capacity to convert sustainability from disclosure into operational capability. The case supports a balanced reading: ESG can strengthen competitive advantage, though only when it is operationally embedded and strategically aligned. Neither condition can simply be assumed.

ii. Recommendations

ALUMIL should continue developing circular economy as a long-term strategic capability rather than treating it as a single, bounded initiative. This means deepening the connections between recycled content, product development, operational systems and customer communication in ways that are mutually reinforcing. The company's existing investment in scrap processing and certified recycled aluminium already provides a solid foundation; building on it coherently is the next step.

Improving the consistency and visibility of ESG metrics over time is the second recommendation. Stakeholders increasingly expect comparable, reliable and trend-based evidence — isolated annual indicators are no longer sufficient to meet that expectation. Stronger data continuity would improve compliance readiness, but it would also, somewhat less obviously, sharpen internal managerial learning and external credibility simultaneously.

A third direction concerns how the company communicates ESG to customers and markets. In project-based and construction-related markets, sustainability only becomes commercially meaningful when customers understand how recycled content, product durability and energy-related performance support their own project requirements. ESG, in

other words, needs to be translated into practical, well-documented benefits. A general corporate message will not accomplish this.

Finally, ALUMIL should maintain disciplined, evidence-based sustainability communication. As ESG becomes more visible in competitive positioning, the risk of greenwashing rises whenever claims are vague or overstated — and that risk is not trivial. The company's long-term advantage will be more durable if it continues to rely on verifiable claims, transparent reporting and balanced communication that acknowledges both achievements and limits with equal honesty.

iii. **Future Research**

One natural extension of this dissertation would be research using primary data. Interviews with managers, employees, customers, suppliers or investors could reveal how ESG is actually understood internally, how it shapes strategic decisions and whether it influences purchasing or investment behaviour externally. That kind of evidence would represent a genuine shift — from strategic plausibility toward richer organisational explanation.

Comparative case research offers a second productive direction. Studying ALUMIL alongside other Greek or European firms in aluminium systems or related industrial sectors would help clarify whether its ESG capabilities are genuinely distinctive or simply part of a broader sectoral shift. Such comparison would be useful precisely because it could distinguish between what is company-specific and what reflects wider competitive trends.

A third direction would involve financial or performance-based analysis. Whether ESG investments, reporting improvements or circular-economy initiatives are actually associated with project wins, export growth, customer retention, margin improvements or shifts in market perception — these remain open empirical questions. Answering them would require more detailed internal and longitudinal data, but the payoff would be substantial: a considerably deeper understanding of how ESG relates to measurable competitive outcomes.

iv. **Final Reflection**

Working through this dissertation has, in retrospect, offered something more than a structured academic exercise. Sustainability, it became increasingly clear, is gradually moving from a peripheral concern to a core element of competitive strategy — and this shift is perhaps most interesting to observe in industrial sectors like aluminium, where the connection to physical processes and material flows is tangible and unavoidable. The ALUMIL case reinforced this view. ESG becomes genuinely persuasive when it is linked to products, processes and real stakeholder relationships — not when it functions as an external reporting obligation imposed from outside the organisation. What also became clearer over the course of this research is that sustainability is not a one-off achievement. It is an ongoing capability-building process. Time, investment and consistency are not optional extras; they are its preconditions.

There was another lesson — perhaps a more uncomfortable one — about working with incomplete and sometimes imperfect information. Public ESG disclosures are a useful starting point. But they do not capture every internal tension, trade-off or organisational constraint that shapes how a company actually behaves. Engaging critically with these sources, rather than accepting them at face value, turned out to be one of the more demanding parts of the research process. And this experience carries relevance beyond the specific case of ALUMIL. Managers and analysts working in practice must similarly make judgements under conditions of partial evidence, conflicting stakeholder expectations and evolving regulatory requirements. Learning to combine theoretical frameworks with cautious, sceptical interpretation is not only an academic skill — it is, the present study takes the position, a practical competence for navigating sustainability in real organisations.

It is worth noting, by way of a final observation, that this dissertation has encouraged a more genuinely nuanced view of ESG than the one with which it began. Sustainability can support competitive advantage — but only when it is backed by real capabilities, credible governance and stakeholder-relevant evidence. For future managerial practice, this points toward a particular orientation: approaching ESG neither as a compliance checklist to be completed nor as a purely moral aspiration to be declared, but as a strategic field in which choices about investment, innovation and communication carry long-term implications. How a company is perceived, and how resilient it can become in a changing business environment, depends — at least in part — on getting those choices right.

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